FIG. 1

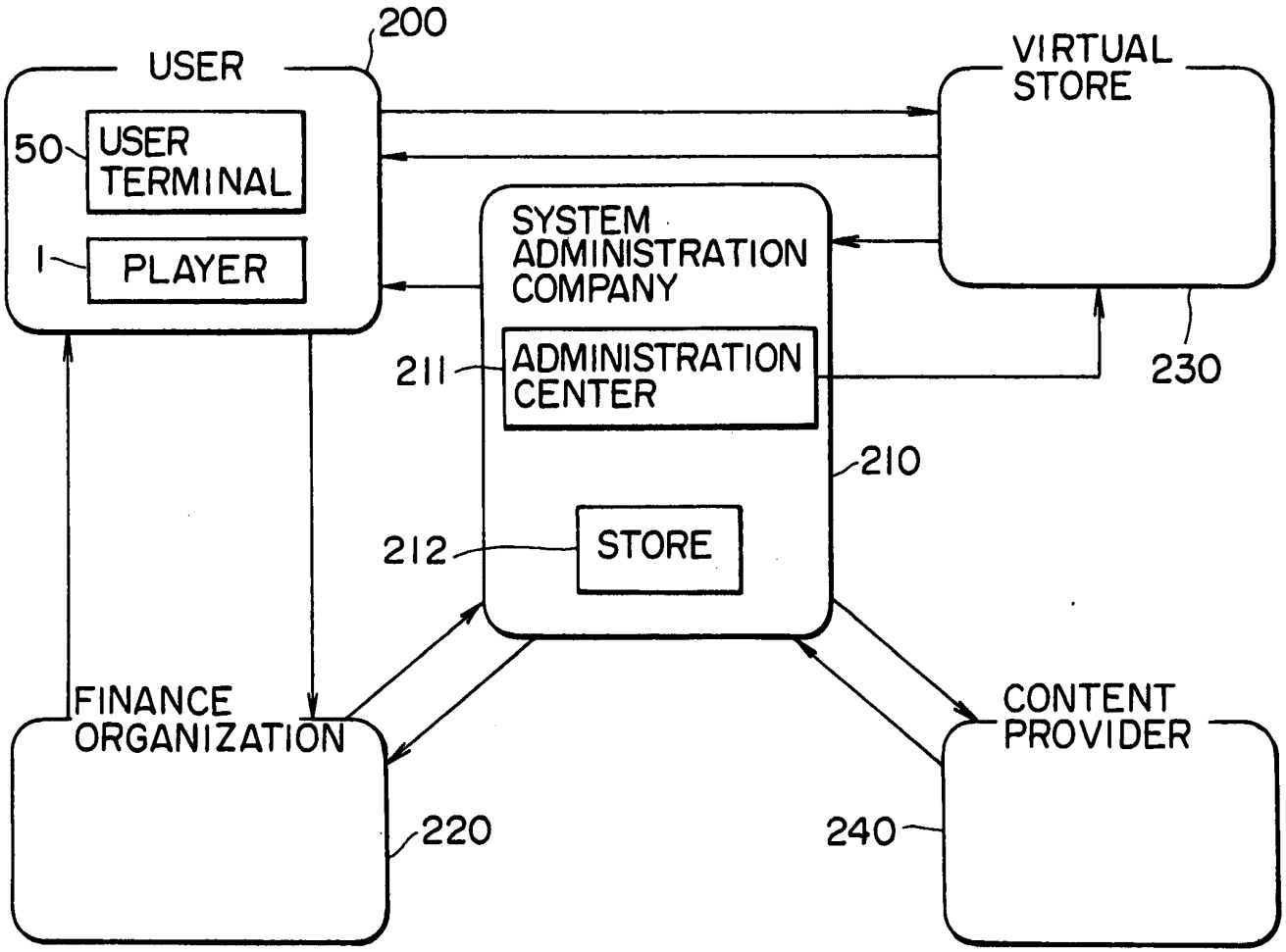
200
USER
50
USER TERMINAL
1
PLAYER
VIRTUAL STORE
230
SYSTEM ADMINISTRATION COMPANY
211
ADMINISTRATION CENTER
210
212
STORE
FINANCE ORGANIZATION
220
CONTENT PROVIDER
240

FIG. 2

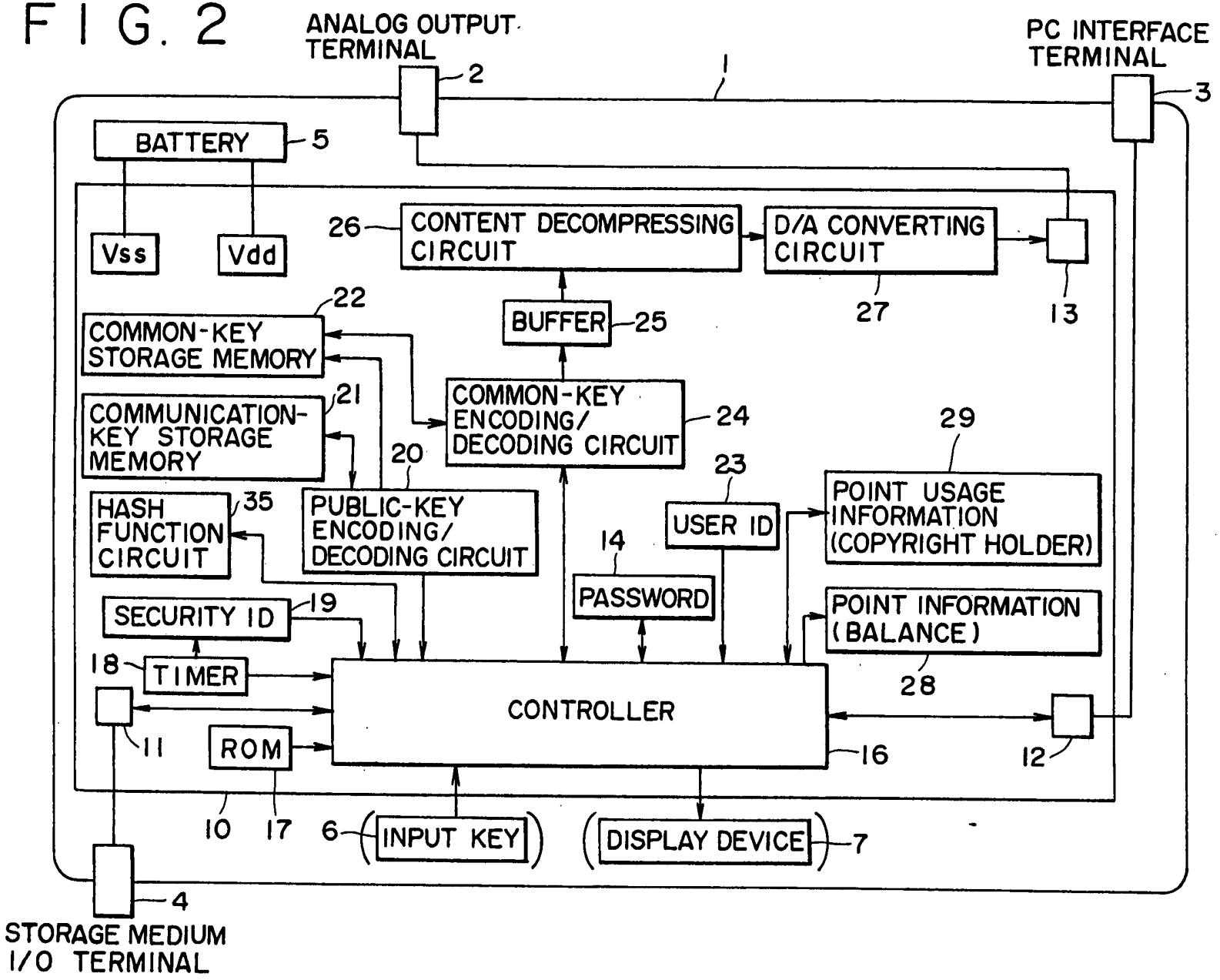
ANALOG OUTPUT TERMINAL
2
1
PC INTERFACE TERMINAL
3
BATTERY
5
Vss
Vdd
26
CONTENT DECOMPRESSING CIRCUIT
D/A CONVERTING CIRCUIT
27
13
22
COMMON-KEY STORAGE MEMORY
BUFFER
25
COMMUNICATION-KEY STORAGE MEMORY
21
COMMON-KEY ENCODING/ DECODING CIRCUIT
24
29
20
23
HASH FUNCTION CIRCUIT
35
PUBLIC-KEY ENCODING/ DECODING CIRCUIT
USER ID
POINT USAGE INFORMATION (COPYRIGHT HOLDER)
14
PASSWORD
SECURITY ID
19
POINT INFORMATION (BALANCE)
18
TIMER
28
CONTROLLER
11
ROM
16
12
10
17
6
INPUT KEY
DISPLAY DEVICE
7
4
STORAGE MEDIUM I/O TERMINAL

FIG. 3

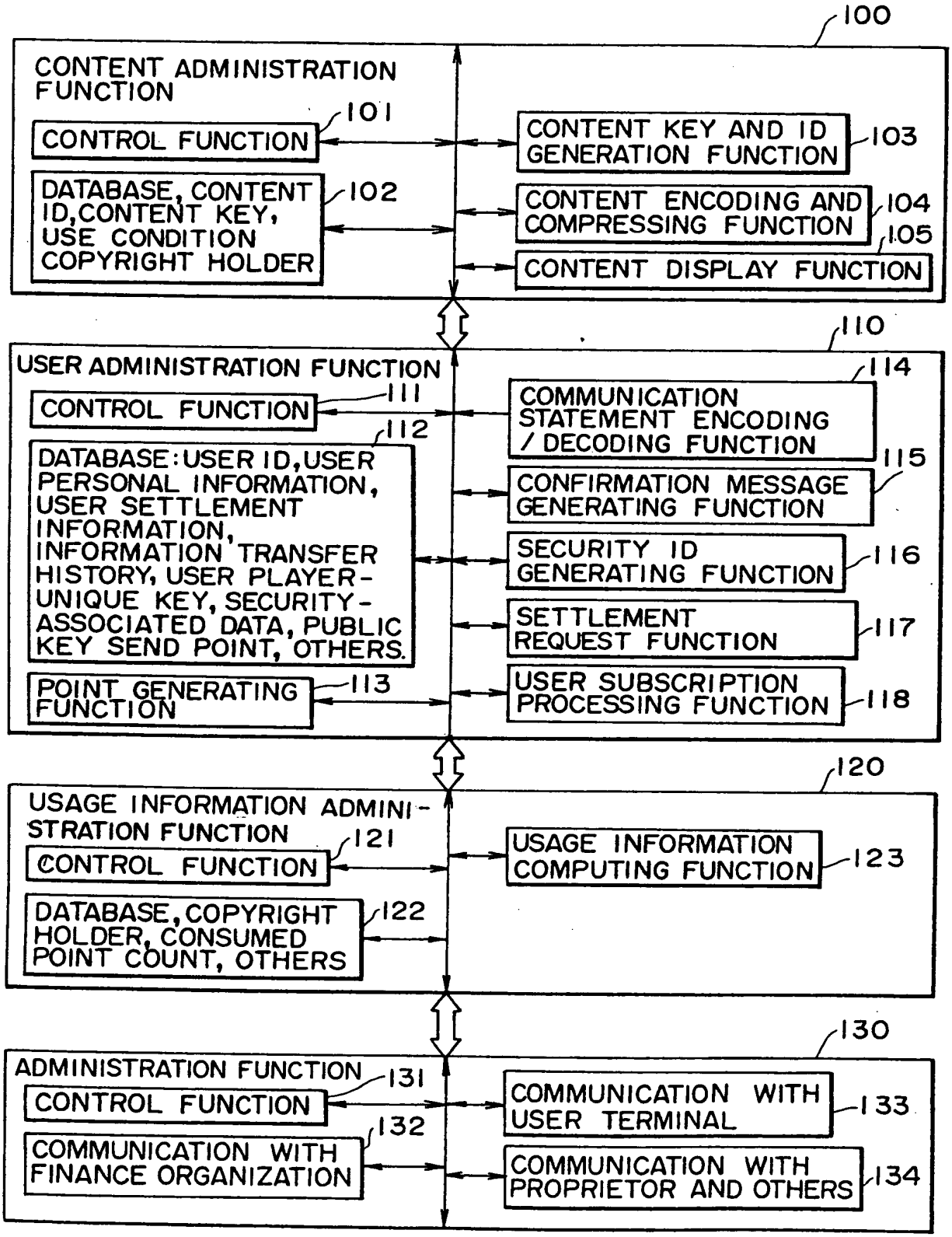
100
CONTENT ADMINISTRATION FUNCTION
101
CONTROL FUNCTION
CONTENT KEY AND ID GENERATION FUNCTION
103
DATABASE, CONTENT ID, CONTENT KEY, USE CONDITION COPYRIGHT HOLDER
102
CONTENT ENCODING AND COMPRESSING FUNCTION
104
105
CONTENT DISPLAY FUNCTION
110
USER ADMINISTRATION FUNCTION
114
CONTROL FUNCTION
111
COMMUNICATION STATEMENT ENCODING / DECODING FUNCTION
112
DATABASE: USER ID, USER PERSONAL INFORMATION, USER SETTLEMENT INFORMATION, INFORMATION TRANSFER HISTORY, USER PLAYER-UNIQUE KEY, SECURITY-ASSOCIATED DATA, PUBLIC KEY SEND POINT, OTHERS.
115
CONFIRMATION MESSAGE GENERATING FUNCTION
SECURITY ID GENERATING FUNCTION
116
SETTLEMENT REQUEST FUNCTION
117
POINT GENERATING FUNCTION
113
USER SUBSCRIPTION PROCESSING FUNCTION
118
120
USAGE INFORMATION ADMINISTRATION FUNCTION
121
CONTROL FUNCTION
USAGE INFORMATION COMPUTING FUNCTION
123
DATABASE, COPYRIGHT HOLDER, CONSUMED POINT COUNT, OTHERS
122
130
ADMINISTRATION FUNCTION
131
CONTROL FUNCTION
COMMUNICATION WITH USER TERMINAL
133
132
COMMUNICATION WITH FINANCE ORGANIZATION
COMMUNICATION WITH PROPRIETOR AND OTHERS
134

FIG. 4

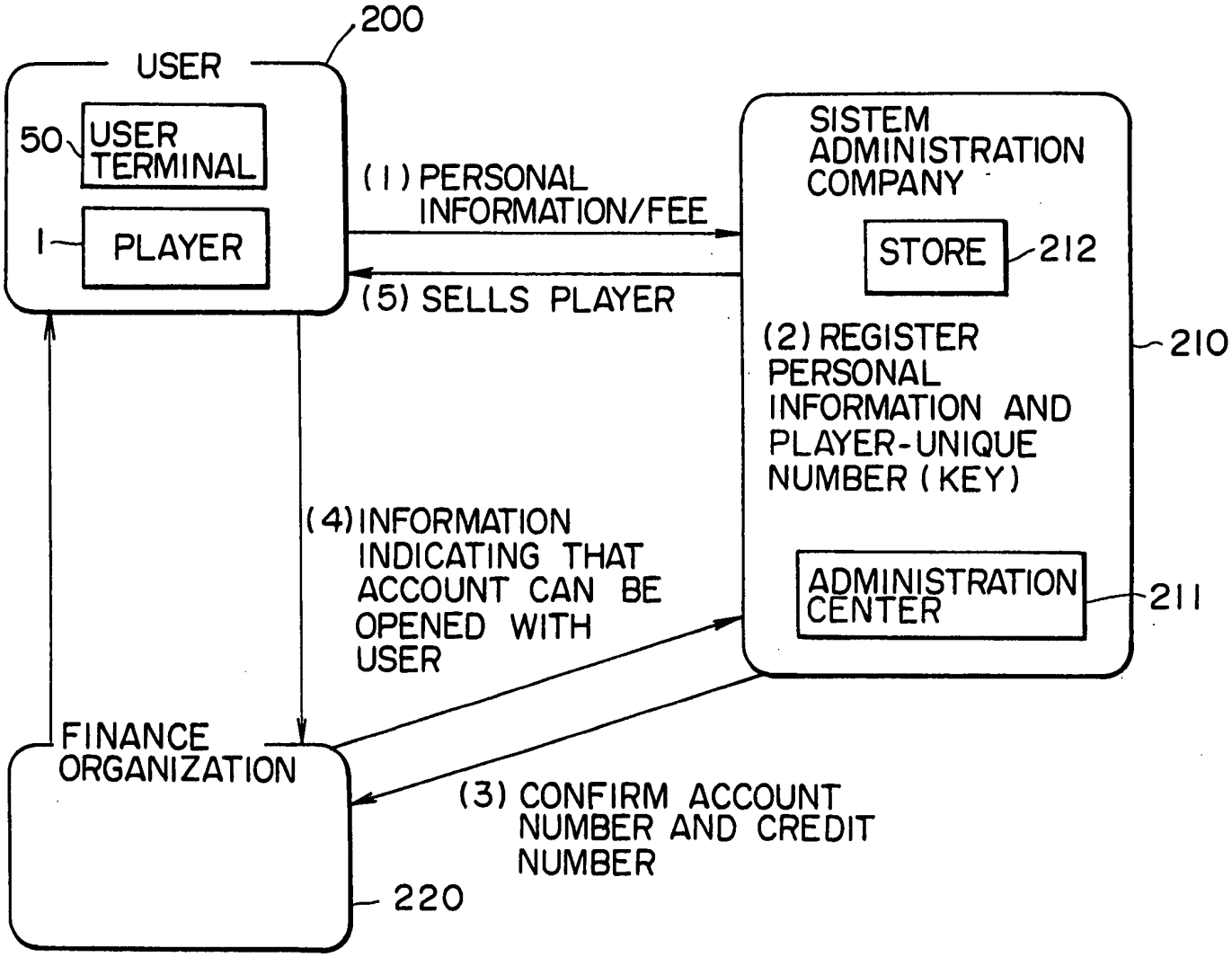
200
USER
50
USER TERMINAL
1
PLAYER
(1) PERSONAL INFORMATION/FEE
(5) SELLS PLAYER
SISTEM ADMINISTRATION COMPANY
STORE
212
(2) REGISTER PERSONAL INFORMATION AND PLAYER-UNIQUE NUMBER (KEY)
210
(4) INFORMATION INDICATING THAT ACCOUNT CAN BE OPENED WITH USER
ADMINISTRATION CENTER
211
FINANCE ORGANIZATION
(3) CONFIRM ACCOUNT NUMBER AND CREDIT NUMBER
220

FIG. 5

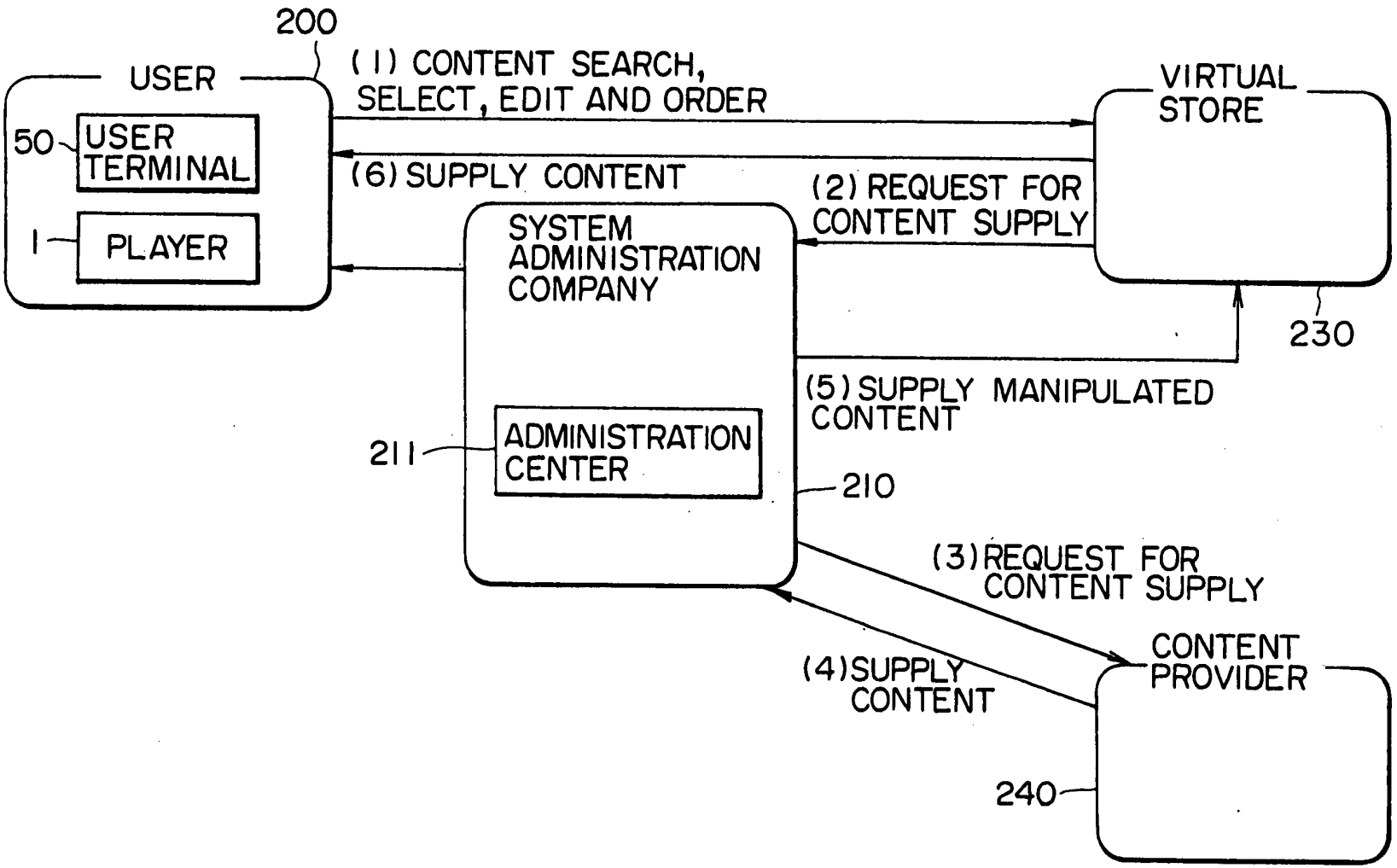
200
USER
(1) CONTENT SEARCH, SELECT, EDIT AND ORDER
VIRTUAL STORE
50
USER TERMINAL
(6) SUPPLY CONTENT
(2) REQUEST FOR CONTENT SUPPLY
1
PLAYER
SYSTEM ADMINISTRATION COMPANY
230
(5) SUPPLY MANIPULATED CONTENT
211
ADMINISTRATION CENTER
210
(3) REQUEST FOR CONTENT SUPPLY
CONTENT PROVIDER
(4) SUPPLY CONTENT
240

FIG. 6

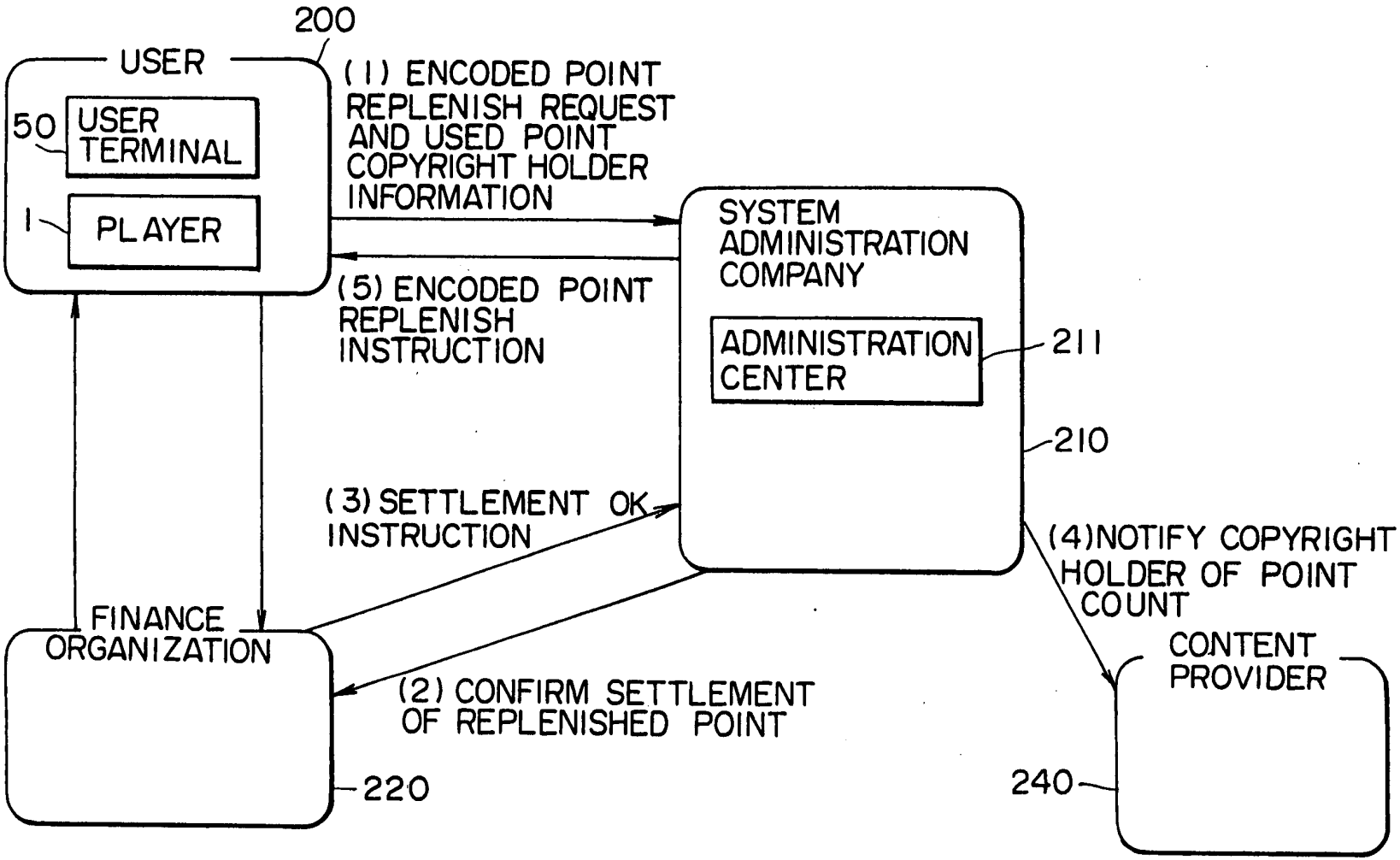
200
USER
50
USER TERMINAL
1
PLAYER
(1) ENCODED POINT REPLENISH REQUEST AND USED POINT COPYRIGHT HOLDER INFORMATION
(5) ENCODED POINT REPLENISH INSTRUCTION
SYSTEM ADMINISTRATION COMPANY
ADMINISTRATION CENTER
211
210
(3) SETTLEMENT OK INSTRUCTION
(4) NOTIFY COPYRIGHT HOLDER OF POINT COUNT
FINANCE ORGANIZATION
(2) CONFIRM SETTLEMENT OF REPLENISHED POINT
220
CONTENT PROVIDER
240

FIG. 7

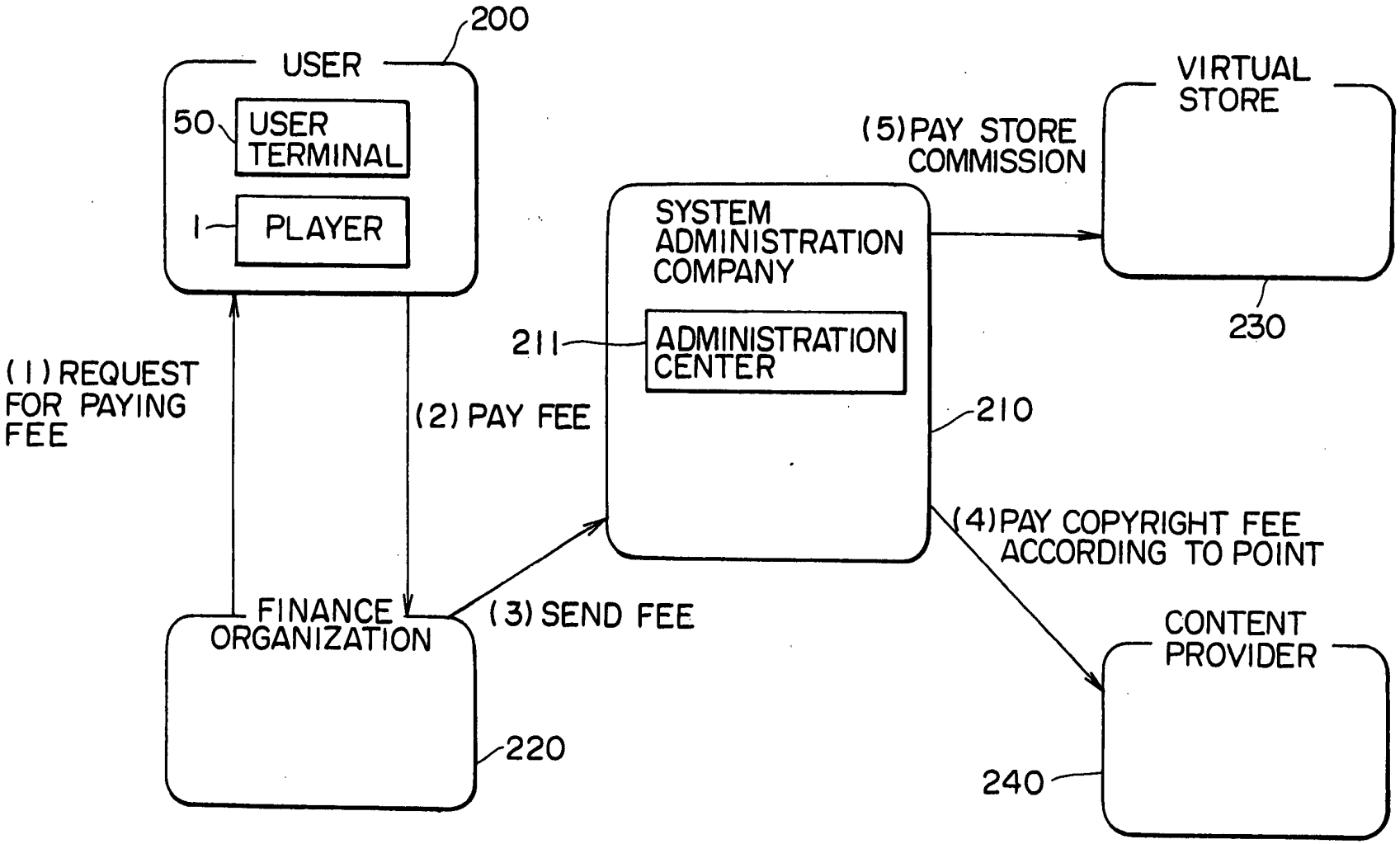
200
USER
50
USER TERMINAL
1
PLAYER
VIRTUAL STORE
(5) PAY STORE COMMISSION
SYSTEM ADMINISTRATION COMPANY
211
ADMINISTRATION CENTER
230
(1) REQUEST FOR PAYING FEE
(2) PAY FEE
210
(4) PAY COPYRIGHT FEE ACCORDING TO POINT
FINANCE ORGANIZATION
(3) SEND FEE
CONTENT PROVIDER
220
240

FIG. 8

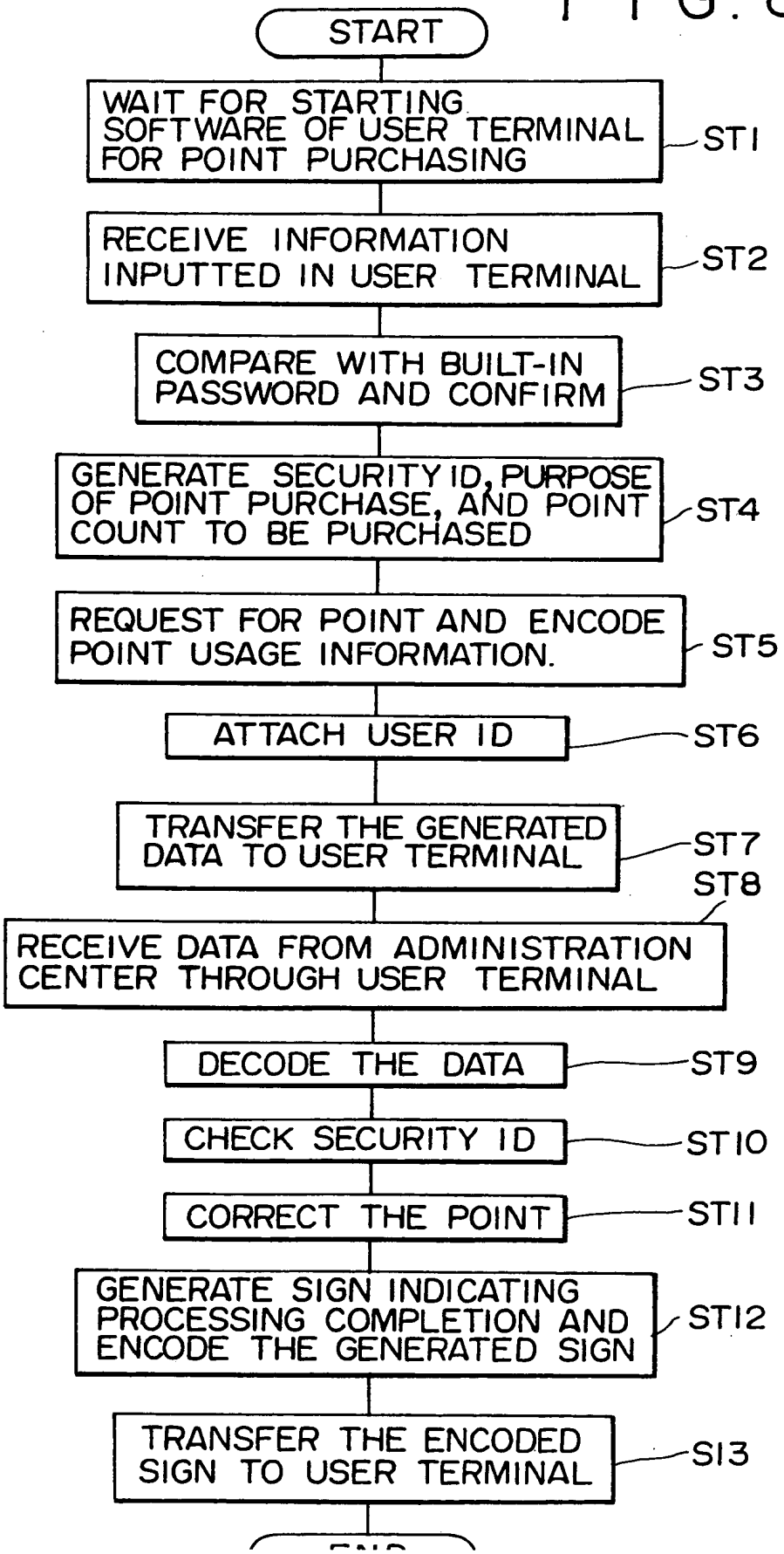
START
WAIT FOR STARTING SOFTWARE OF USER TERMINAL FOR POINT PURCHASING
ST1
RECEIVE INFORMATION INPUTTED IN USER TERMINAL
ST2
COMPARE WITH BUILT-IN PASSWORD AND CONFIRM
ST3
GENERATE SECURITY ID, PURPOSE OF POINT PURCHASE, AND POINT COUNT TO BE PURCHASED
ST4
REQUEST FOR POINT AND ENCODE POINT USAGE INFORMATION.
ST5
ATTACH USER ID
ST6
TRANSFER THE GENERATED DATA TO USER TERMINAL
ST7
ST8
RECEIVE DATA FROM ADMINISTRATION CENTER THROUGH USER TERMINAL
DECODE THE DATA
ST9
CHECK SECURITY ID
ST10
CORRECT THE POINT
ST11
GENERATE SIGN INDICATING PROCESSING COMPLETION AND ENCODE THE GENERATED SIGN
ST12
TRANSFER THE ENCODED SIGN TO USER TERMINAL
S13

FIG. 9

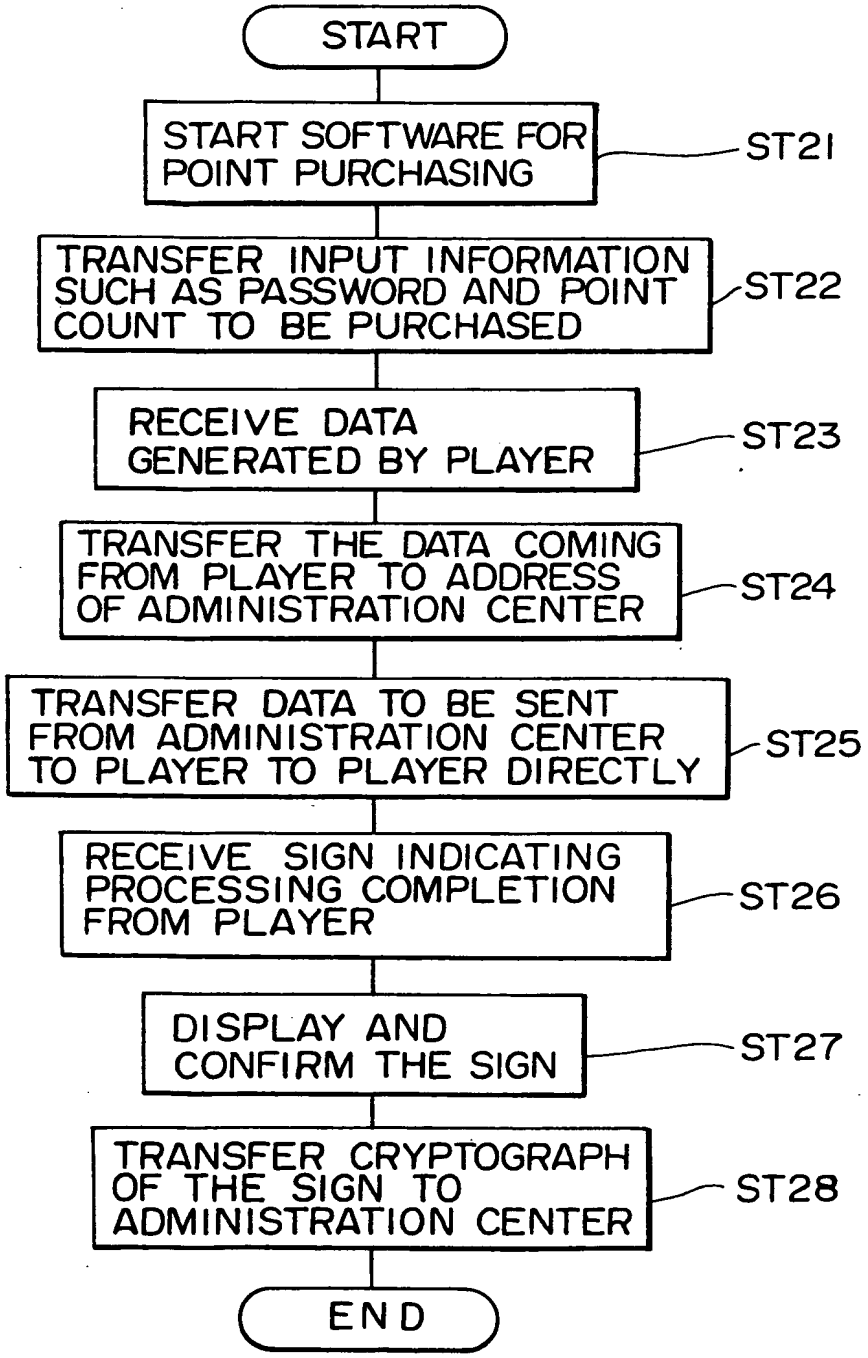
START
START SOFTWARE FOR POINT PURCHASING
ST21
TRANSFER INPUT INFORMATION SUCH AS PASSWORD AND POINT COUNT TO BE PURCHASED
ST22
RECEIVE DATA GENERATED BY PLAYER
ST23
TRANSFER THE DATA COMING FROM PLAYER TO ADDRESS OF ADMINISTRATION CENTER
ST24
TRANSFER DATA TO BE SENT FROM ADMINISTRATION CENTER TO PLAYER TO PLAYER DIRECTLY
ST25
RECEIVE SIGN INDICATING PROCESSING COMPLETION FROM PLAYER
ST26
DISPLAY AND CONFIRM THE SIGN
ST27
TRANSFER CRYPTOGRAPH OF THE SIGN TO ADMINISTRATION CENTER
ST28
END

FIG. 10

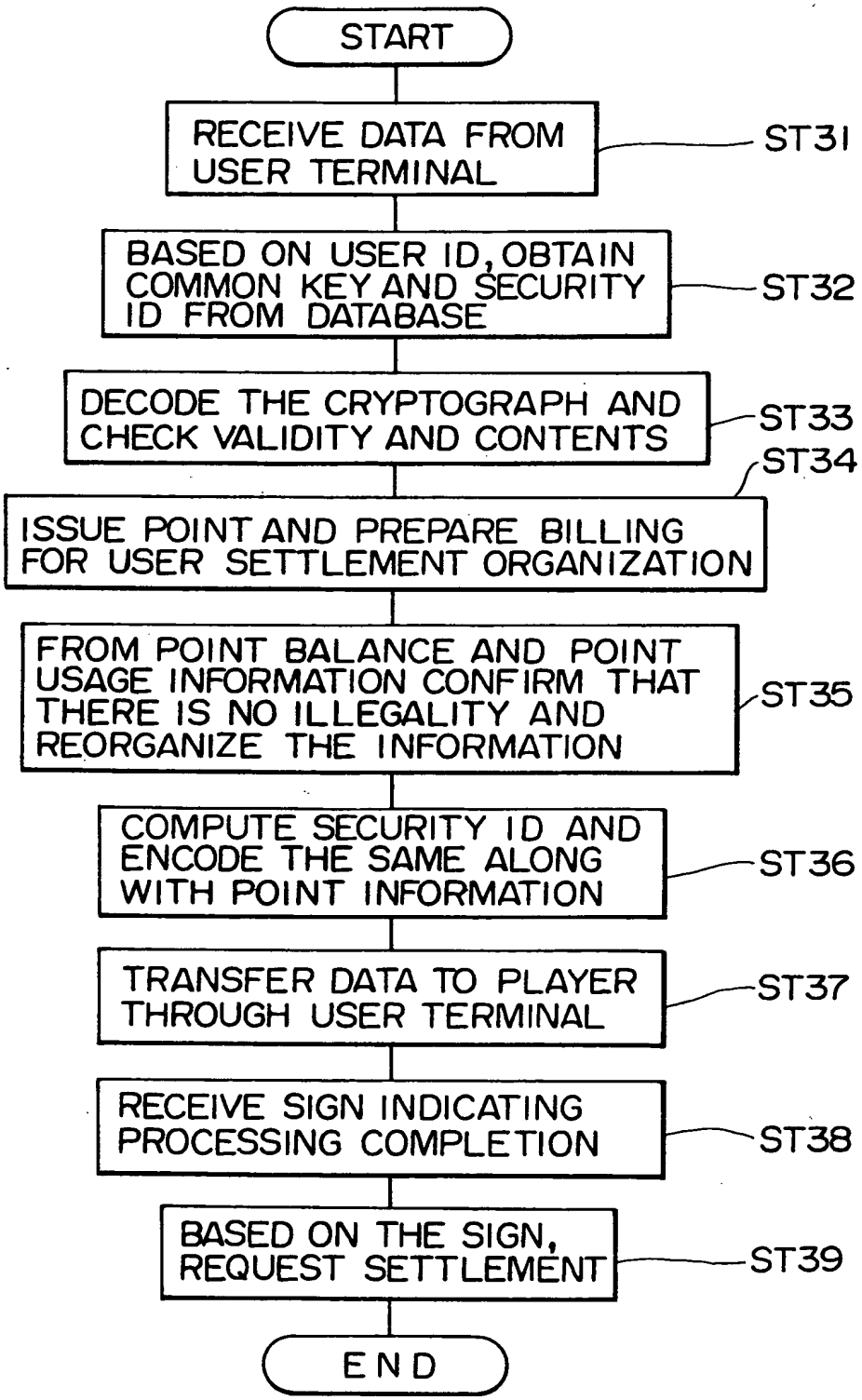
START
RECEIVE DATA FROM USER TERMINAL
ST31
BASED ON USER ID, OBTAIN COMMON KEY AND SECURITY ID FROM DATABASE
ST32
DECODE THE CRYPTOGRAPH AND CHECK VALIDITY AND CONTENTS
ST33
ST34
ISSUE POINT AND PREPARE BILLING FOR USER SETTLEMENT ORGANIZATION
FROM POINT BALANCE AND POINT USAGE INFORMATION CONFIRM THAT THERE IS NO ILLEGALITY AND REORGANIZE THE INFORMATION
ST35
COMPUTE SECURITY ID AND ENCODE THE SAME ALONG WITH POINT INFORMATION
ST36
TRANSFER DATA TO PLAYER THROUGH USER TERMINAL
ST37
RECEIVE SIGN INDICATING PROCESSING COMPLETION
ST38
BASED ON THE SIGN, REQUEST SETTLEMENT
ST39
END

FIG. 11

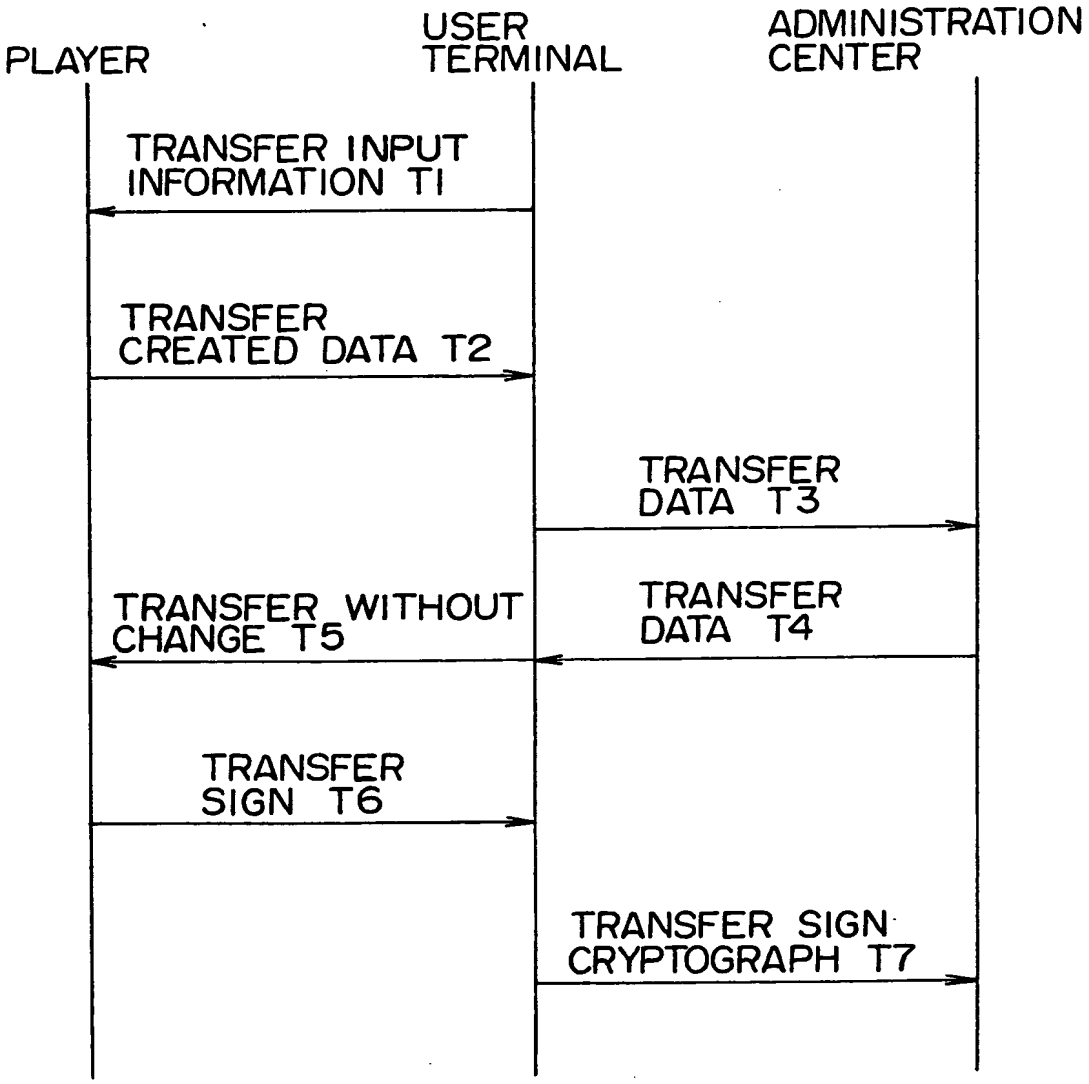
PLAYER
USER TERMINAL
ADMINISTRATION CENTER
TRANSFER INPUT INFORMATION T1
TRANSFER CREATED DATA T2
TRANSFER DATA T3
TRANSFER WITHOUT CHANGE T5
TRANSFER DATA T4
TRANSFER SIGN T6
TRANSFER SIGN CRYPTOGRAPH T7

FIG. 12

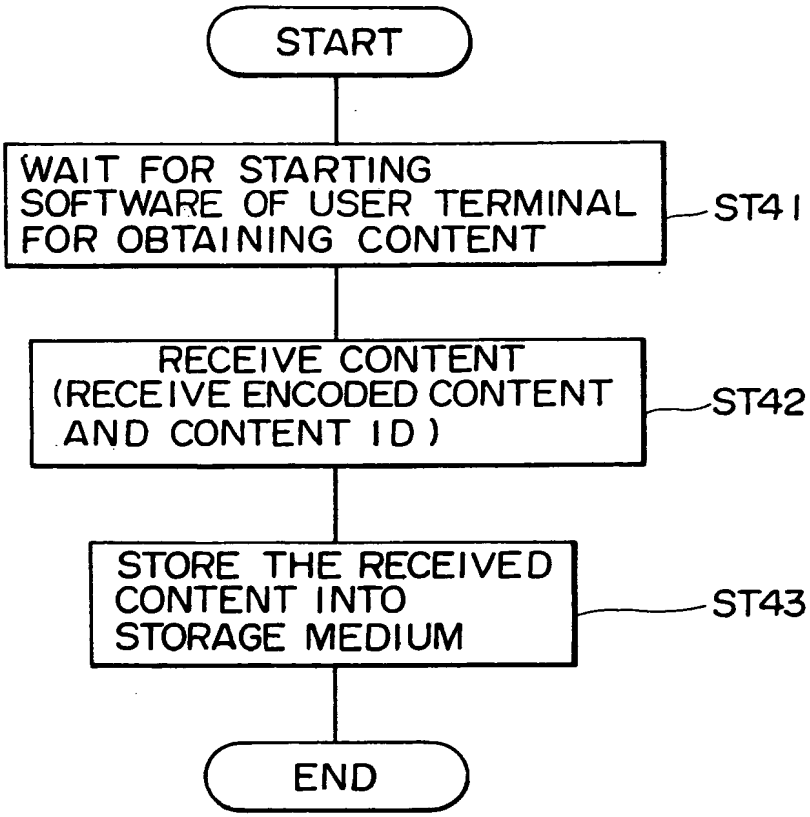
START
WAIT FOR STARTING SOFTWARE OF USER TERMINAL FOR OBTAINING CONTENT
ST41
RECEIVE CONTENT (RECEIVE ENCODED CONTENT AND CONTENT ID)
ST42
STORE THE RECEIVED CONTENT INTO STORAGE MEDIUM
ST43
END

FIG. 13

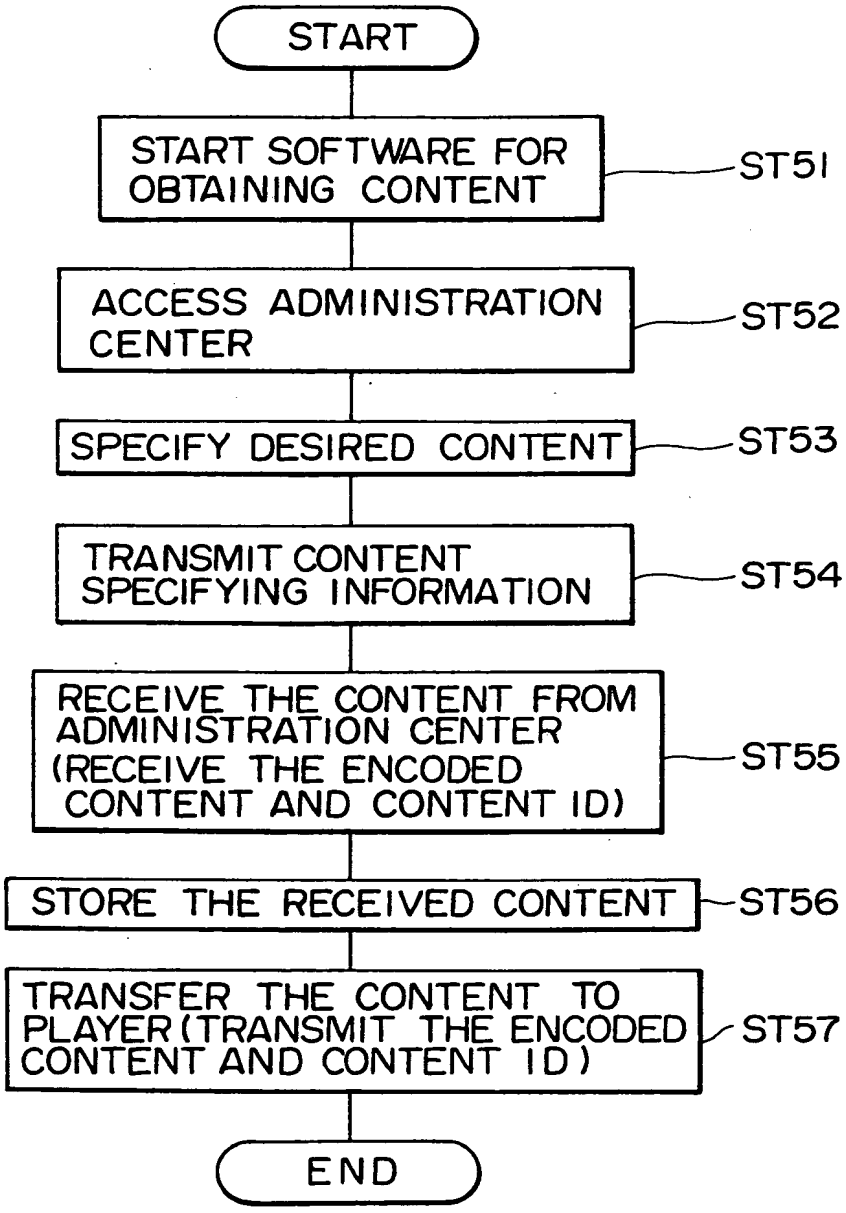
START
START SOFTWARE FOR OBTAINING CONTENT
ST51
ACCESS ADMINISTRATION CENTER
ST52
SPECIFY DESIRED CONTENT
ST53
TRANSMIT CONTENT SPECIFYING INFORMATION
ST54
RECEIVE THE CONTENT FROM ADMINISTRATION CENTER (RECEIVE THE ENCODED CONTENT AND CONTENT ID)
ST55
STORE THE RECEIVED CONTENT
ST56
TRANSFER THE CONTENT TO PLAYER (TRANSMIT THE ENCODED CONTENT AND CONTENT ID)
ST57
END

FIG. 14

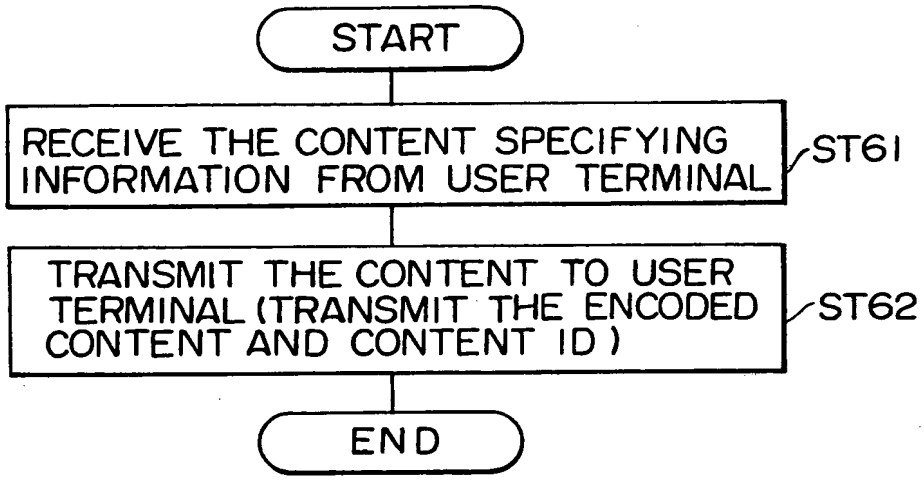
START
RECEIVE THE CONTENT SPECIFYING INFORMATION FROM USER TERMINAL
ST61
TRANSMIT THE CONTENT TO USER TERMINAL (TRANSMIT THE ENCODED CONTENT AND CONTENT ID)
ST62
END

FIG. 15

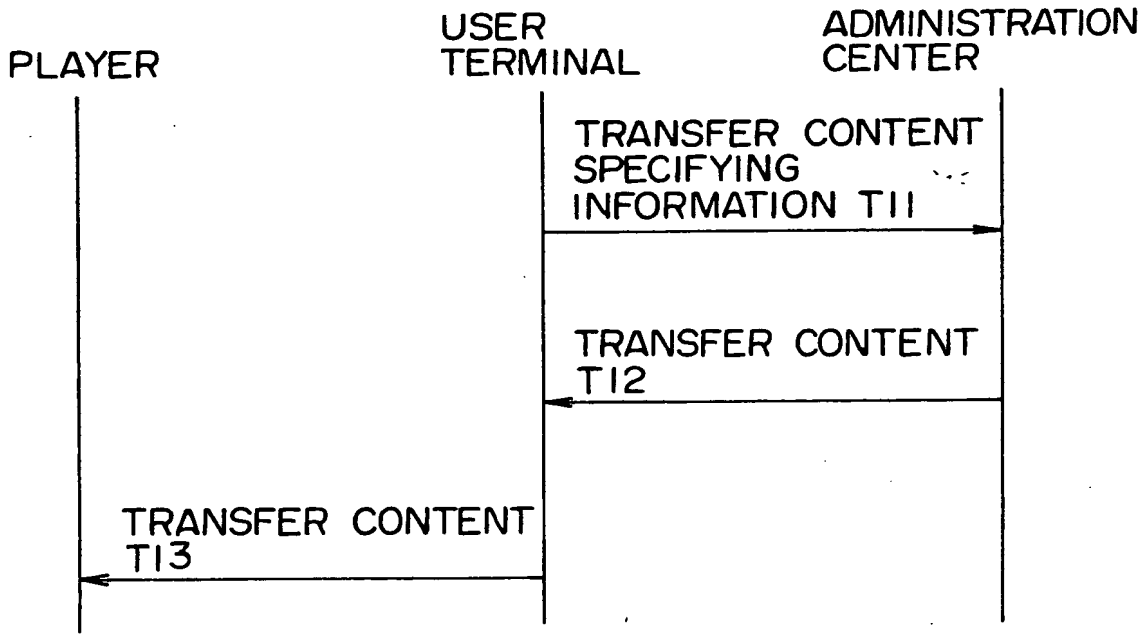
PLAYER
USER TERMINAL
ADMINISTRATION CENTER
TRANSFER CONTENT SPECIFYING INFORMATION T11
TRANSFER CONTENT T12
TRANSFER CONTENT T13

FIG. 16

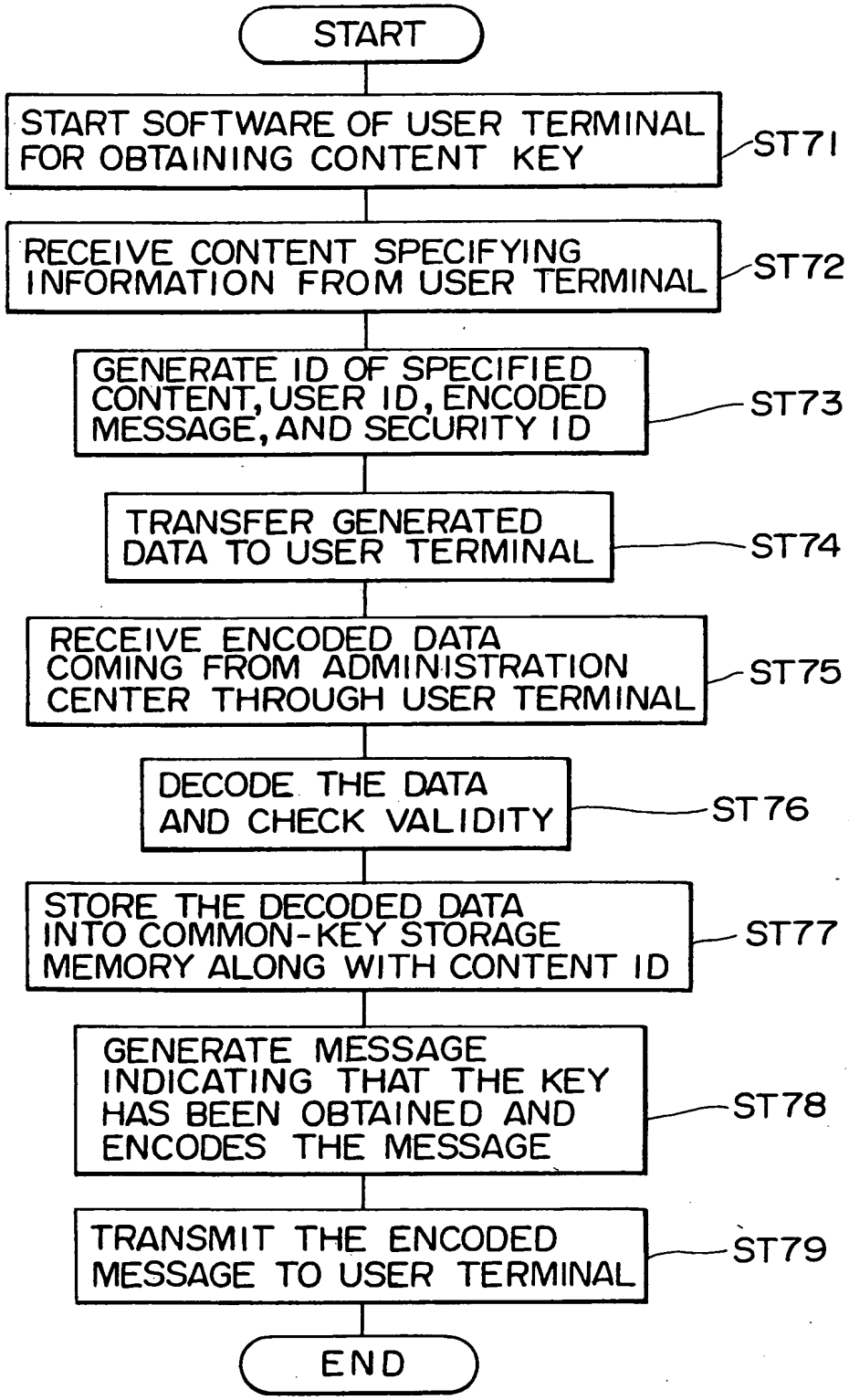
START
START SOFTWARE OF USER TERMINAL FOR OBTAINING CONTENT KEY
ST71
RECEIVE CONTENT SPECIFYING INFORMATION FROM USER TERMINAL
ST72
GENERATE ID OF SPECIFIED CONTENT, USER ID, ENCODED MESSAGE, AND SECURITY ID
ST73
TRANSFER GENERATED DATA TO USER TERMINAL
ST74
RECEIVE ENCODED DATA COMING FROM ADMINISTRATION CENTER THROUGH USER TERMINAL
ST75
DECODE THE DATA AND CHECK VALIDITY
ST76
STORE THE DECODED DATA INTO COMMON-KEY STORAGE MEMORY ALONG WITH CONTENT ID
ST77
GENERATE MESSAGE INDICATING THAT THE KEY HAS BEEN OBTAINED AND ENCODES THE MESSAGE
ST78
TRANSMIT THE ENCODED MESSAGE TO USER TERMINAL
ST79
END

FIG. 17

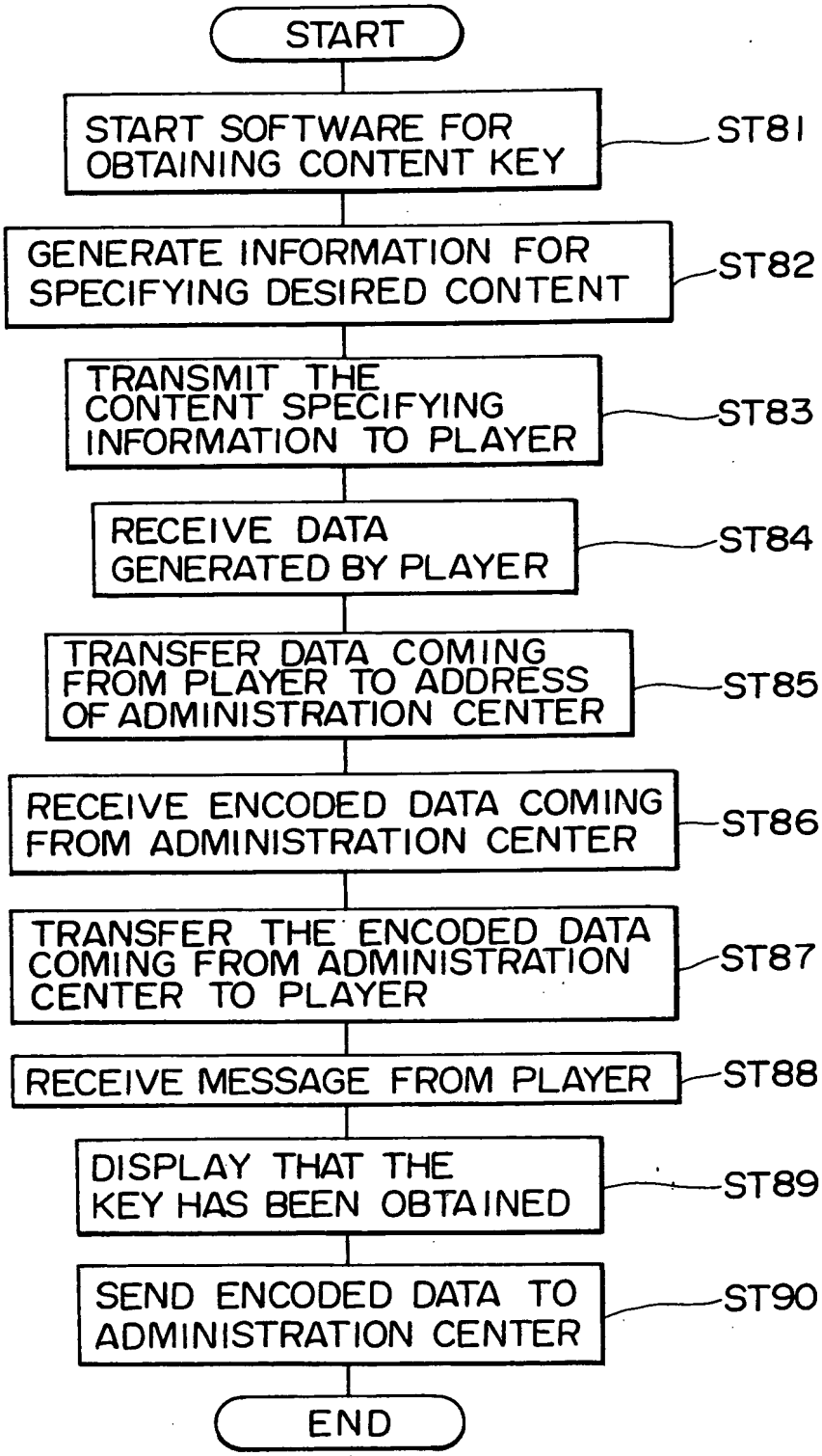
START
START SOFTWARE FOR OBTAINING CONTENT KEY
ST81
GENERATE INFORMATION FOR SPECIFYING DESIRED CONTENT
ST82
TRANSMIT THE CONTENT SPECIFYING INFORMATION TO PLAYER
ST83
RECEIVE DATA GENERATED BY PLAYER
ST84
TRANSFER DATA COMING FROM PLAYER TO ADDRESS OF ADMINISTRATION CENTER
ST85
RECEIVE ENCODED DATA COMING FROM ADMINISTRATION CENTER
ST86
TRANSFER THE ENCODED DATA COMING FROM ADMINISTRATION CENTER TO PLAYER
ST87
RECEIVE MESSAGE FROM PLAYER
ST88
DISPLAY THAT THE KEY HAS BEEN OBTAINED
ST89
SEND ENCODED DATA TO ADMINISTRATION CENTER
ST90
END

FIG. 18

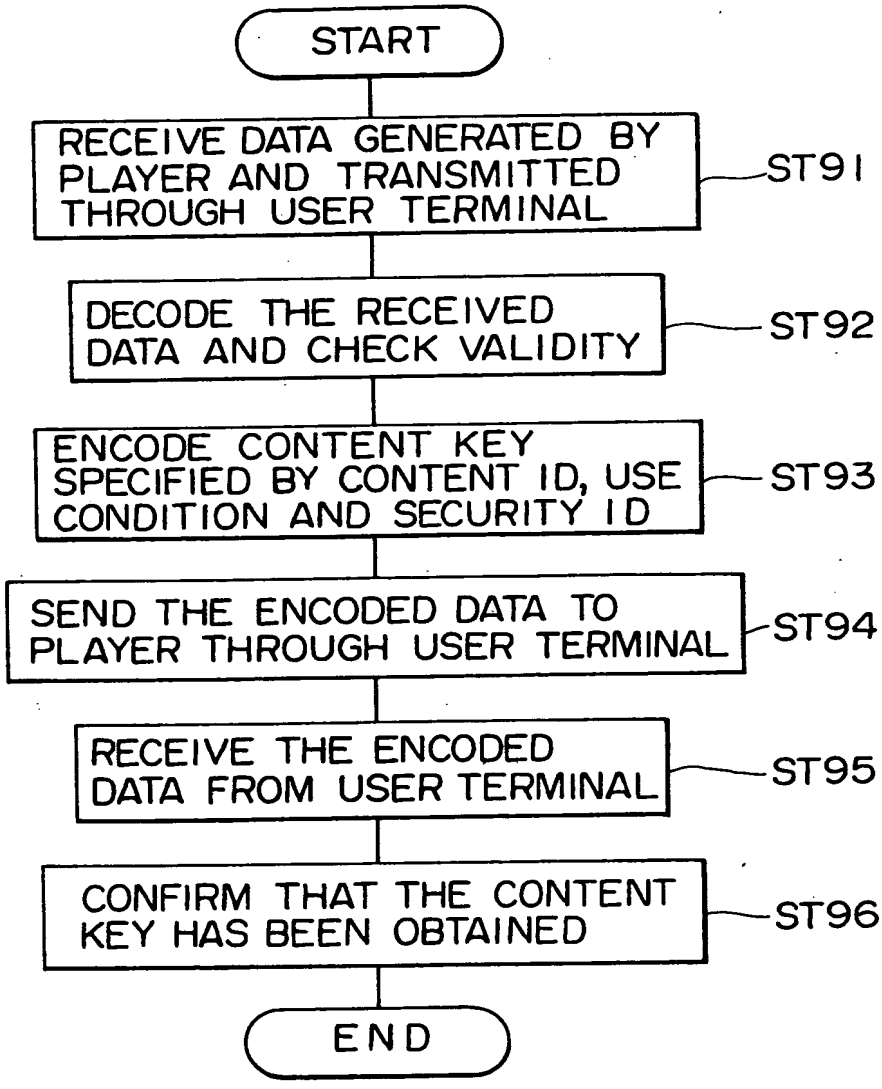
START
RECEIVE DATA GENERATED BY PLAYER AND TRANSMITTED THROUGH USER TERMINAL
ST91
DECODE THE RECEIVED DATA AND CHECK VALIDITY
ST92
ENCODE CONTENT KEY SPECIFIED BY CONTENT ID, USE CONDITION AND SECURITY ID
ST93
SEND THE ENCODED DATA TO PLAYER THROUGH USER TERMINAL
ST94
RECEIVE THE ENCODED DATA FROM USER TERMINAL
ST95
CONFIRM THAT THE CONTENT KEY HAS BEEN OBTAINED
ST96
END

FIG. 19

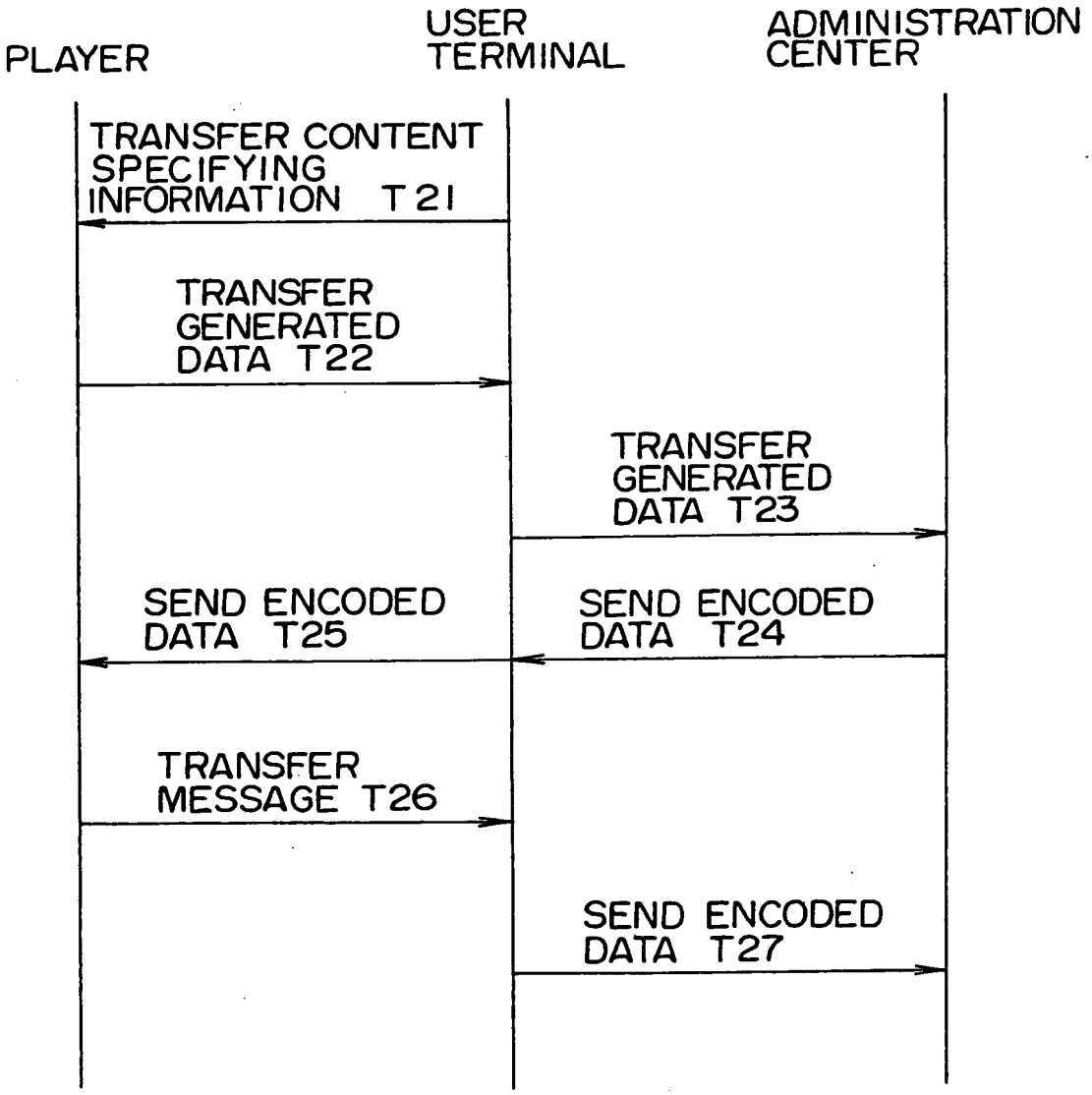
PLAYER
USER TERMINAL
ADMINISTRATION CENTER
TRANSFER CONTENT SPECIFYING INFORMATION T21
TRANSFER GENERATED DATA T22
TRANSFER GENERATED DATA T23
SEND ENCODED DATA T25
SEND ENCODED DATA T24
TRANSFER MESSAGE T26
SEND ENCODED DATA T27

FIG. 20

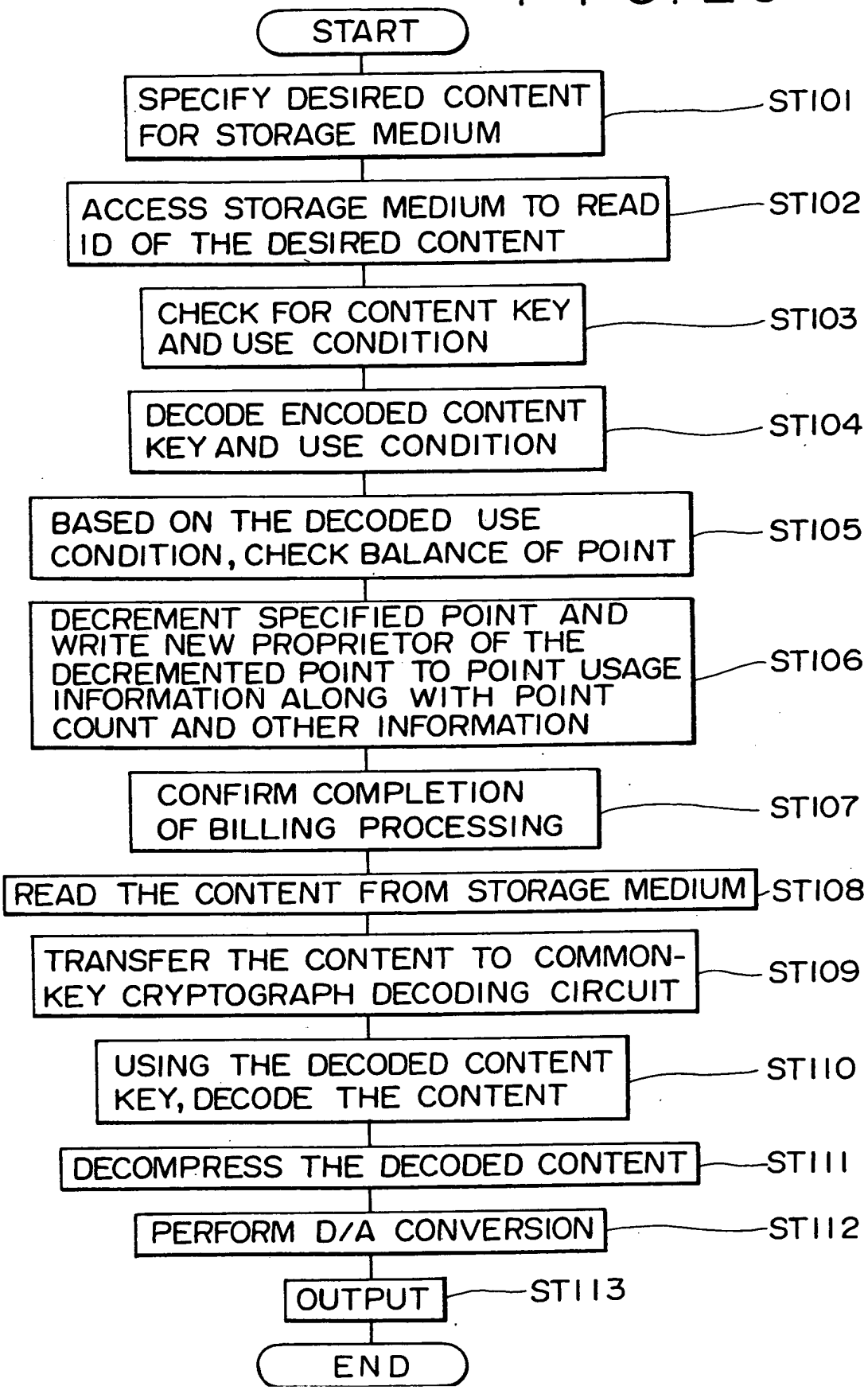
START
SPECIFY DESIRED CONTENT FOR STORAGE MEDIUM
ST101
ACCESS STORAGE MEDIUM TO READ ID OF THE DESIRED CONTENT
ST102
CHECK FOR CONTENT KEY AND USE CONDITION
ST103
DECODE ENCODED CONTENT KEY AND USE CONDITION
ST104
BASED ON THE DECODED USE CONDITION, CHECK BALANCE OF POINT
ST105
DECREMENT SPECIFIED POINT AND WRITE NEW PROPRIETOR OF THE DECREMENTED POINT TO POINT USAGE INFORMATION ALONG WITH POINT COUNT AND OTHER INFORMATION
ST106
CONFIRM COMPLETION OF BILLING PROCESSING
ST107
READ THE CONTENT FROM STORAGE MEDIUM
ST108
TRANSFER THE CONTENT TO COMMON-KEY CRYPTOGRAPH DECODING CIRCUIT
ST109
USING THE DECODED CONTENT KEY, DECODE THE CONTENT
ST110
DECOMPRESS THE DECODED CONTENT
ST111
PERFORM D/A CONVERSION
ST112
OUTPUT
ST113
END

FIG. 21

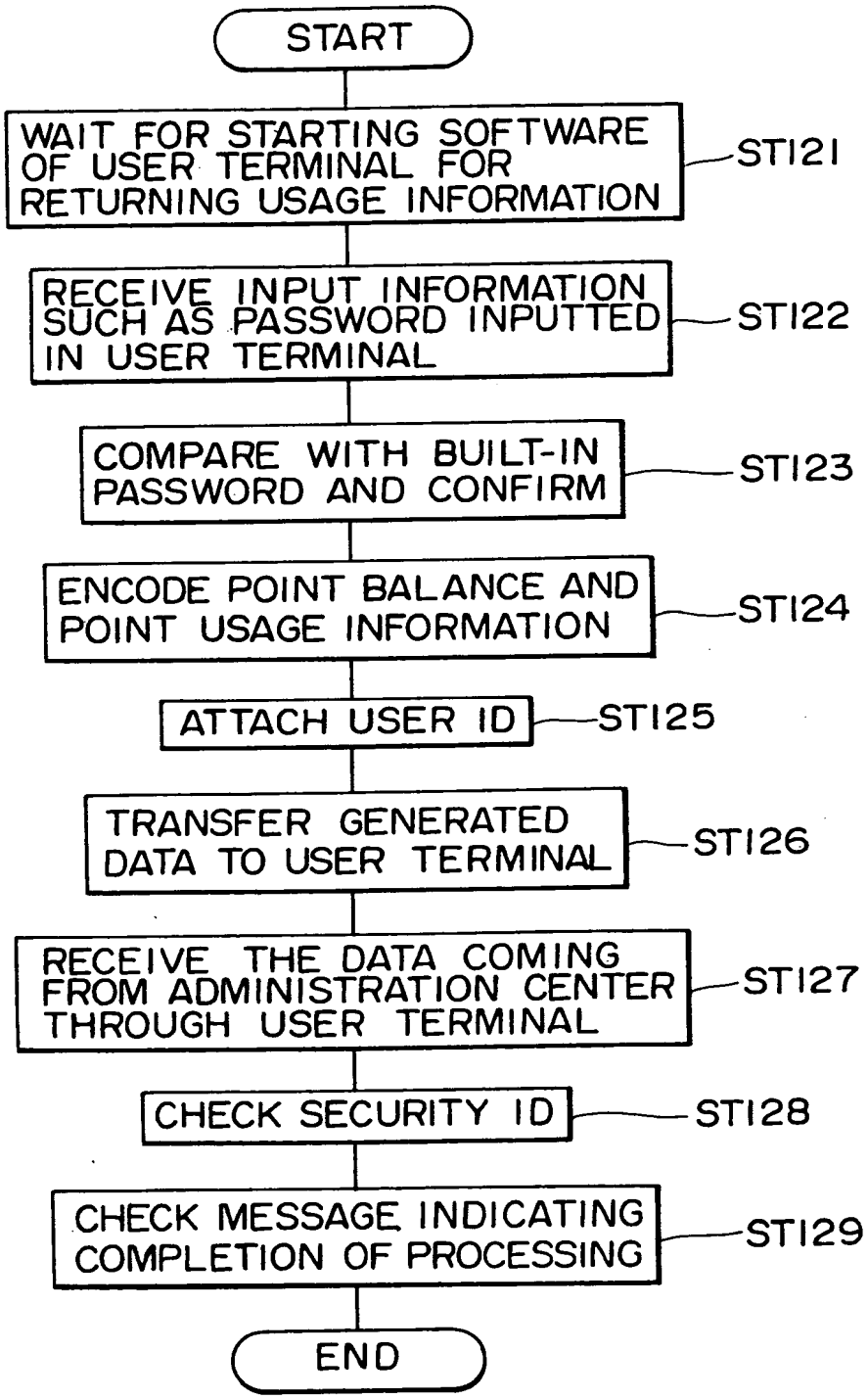
START
WAIT FOR STARTING SOFTWARE OF USER TERMINAL FOR RETURNING USAGE INFORMATION
ST121
RECEIVE INPUT INFORMATION SUCH AS PASSWORD INPUTTED IN USER TERMINAL
ST122
COMPARE WITH BUILT-IN PASSWORD AND CONFIRM
ST123
ENCODE POINT BALANCE AND POINT USAGE INFORMATION
ST124
ATTACH USER ID
ST125
TRANSFER GENERATED DATA TO USER TERMINAL
ST126
RECEIVE THE DATA COMING FROM ADMINISTRATION CENTER THROUGH USER TERMINAL
ST127
CHECK SECURITY ID
ST128
CHECK MESSAGE INDICATING COMPLETION OF PROCESSING
ST129
END

FIG. 22

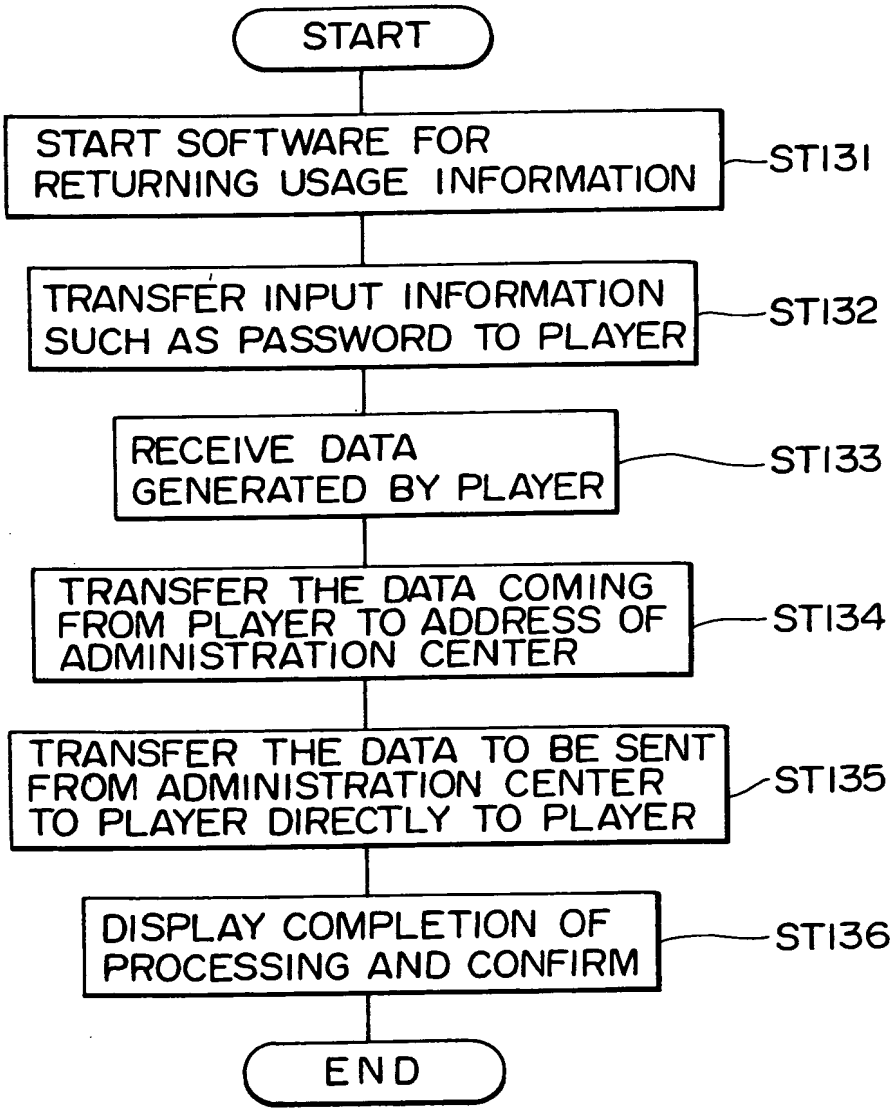
START
START SOFTWARE FOR RETURNING USAGE INFORMATION
ST131
TRANSFER INPUT INFORMATION SUCH AS PASSWORD TO PLAYER
ST132
RECEIVE DATA GENERATED BY PLAYER
ST133
TRANSFER THE DATA COMING FROM PLAYER TO ADDRESS OF ADMINISTRATION CENTER
ST134
TRANSFER THE DATA TO BE SENT FROM ADMINISTRATION CENTER TO PLAYER DIRECTLY TO PLAYER
ST135
DISPLAY COMPLETION OF PROCESSING AND CONFIRM
ST136
END

FIG. 23

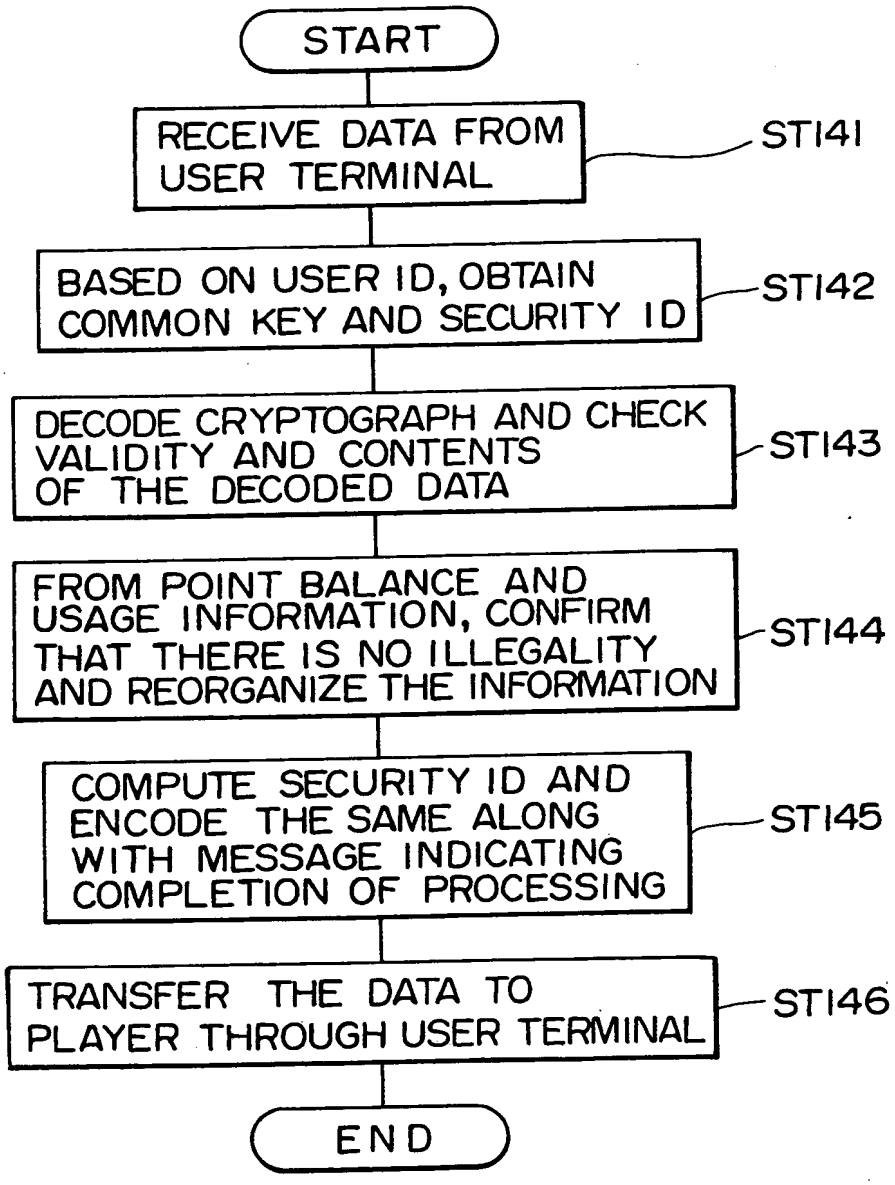
START
RECEIVE DATA FROM USER TERMINAL
ST141
BASED ON USER ID, OBTAIN COMMON KEY AND SECURITY ID
ST142
DECODE CRYPTOGRAPH AND CHECK VALIDITY AND CONTENTS OF THE DECODED DATA
ST143
FROM POINT BALANCE AND USAGE INFORMATION, CONFIRM THAT THERE IS NO ILLEGALITY AND REORGANIZE THE INFORMATION
ST144
COMPUTE SECURITY ID AND ENCODE THE SAME ALONG WITH MESSAGE INDICATING COMPLETION OF PROCESSING
ST145
TRANSFER THE DATA TO PLAYER THROUGH USER TERMINAL
ST146
END

FIG. 24

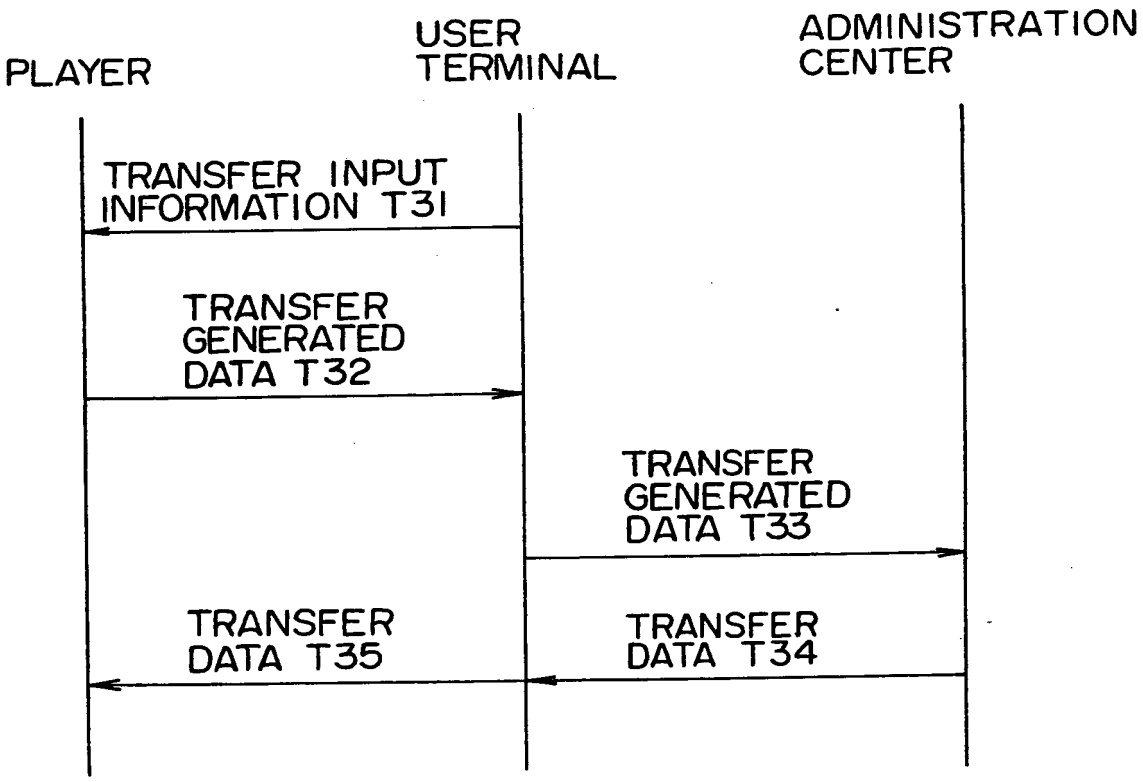
PLAYER
USER TERMINAL
ADMINISTRATION CENTER
TRANSFER INPUT INFORMATION T31
TRANSFER GENERATED DATA T32
TRANSFER GENERATED DATA T33
TRANSFER DATA T35
TRANSFER DATA T34

FIG. 25

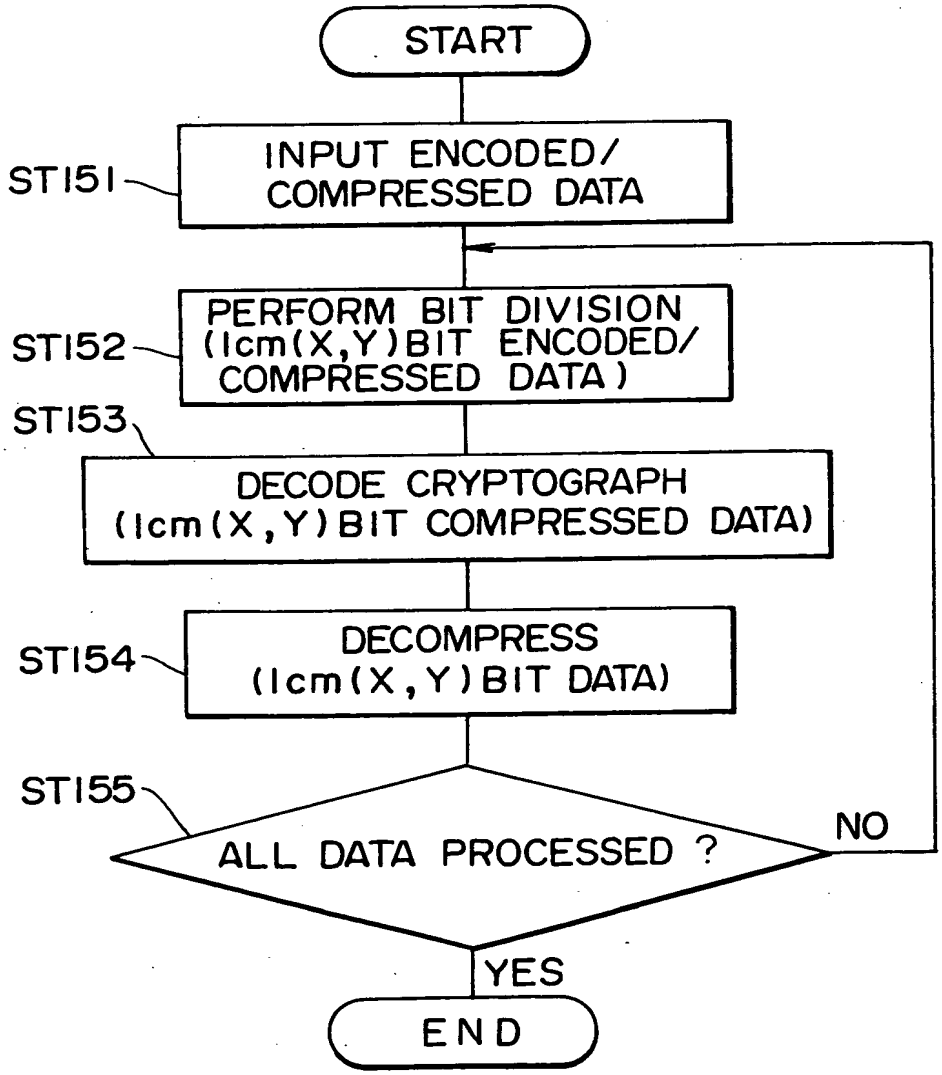
START
ST151
INPUT ENCODED/ COMPRESSED DATA
ST152
PERFORM BIT DIVISION (lcm(X,Y)BIT ENCODED/ COMPRESSED DATA)
ST153
DECODE CRYPTOGRAPH (lcm(X,Y)BIT COMPRESSED DATA)
ST154
DECOMPRESS (lcm(X,Y)BIT DATA)
ST155
ALL DATA PROCESSED ?
NO
YES
END

FIG. 26

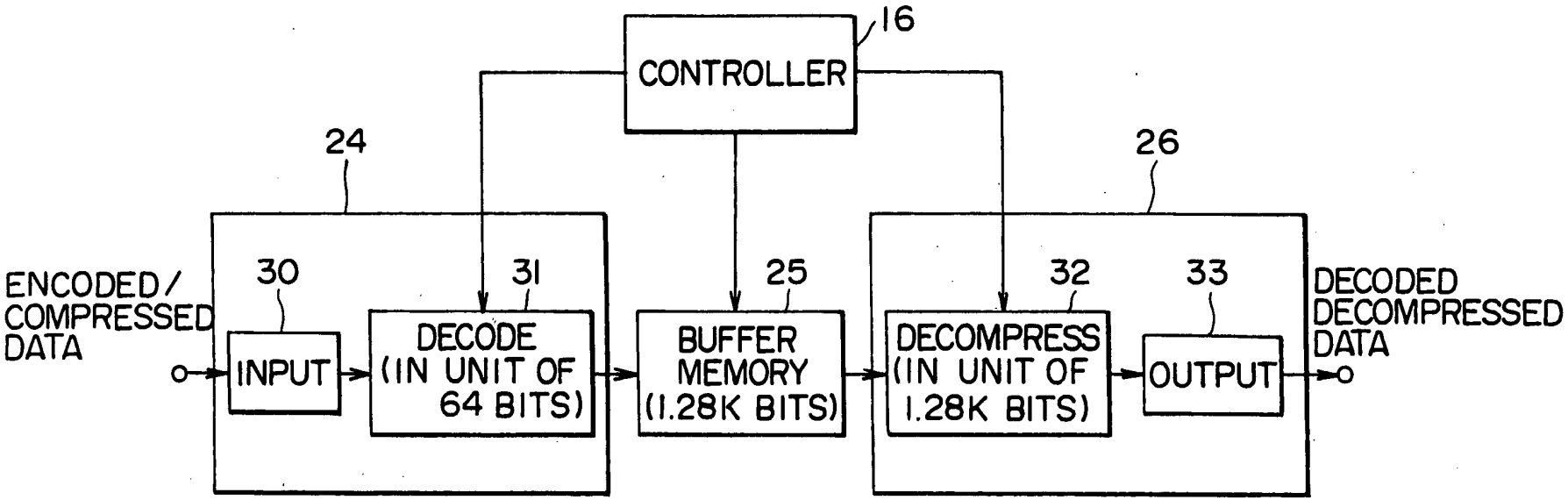
CONTROLLER
16
24
26
ENCODED/
COMPRESSED
DATA
30
31
25
32
33
INPUT
DECODE
(IN UNIT OF
64 BITS)
BUFFER
MEMORY
(1.28K BITS)
DECOMPRESS
(IN UNIT OF
1.28K BITS)
OUTPUT
DECODED
DECOMPRESSED
DATA

FIG. 27

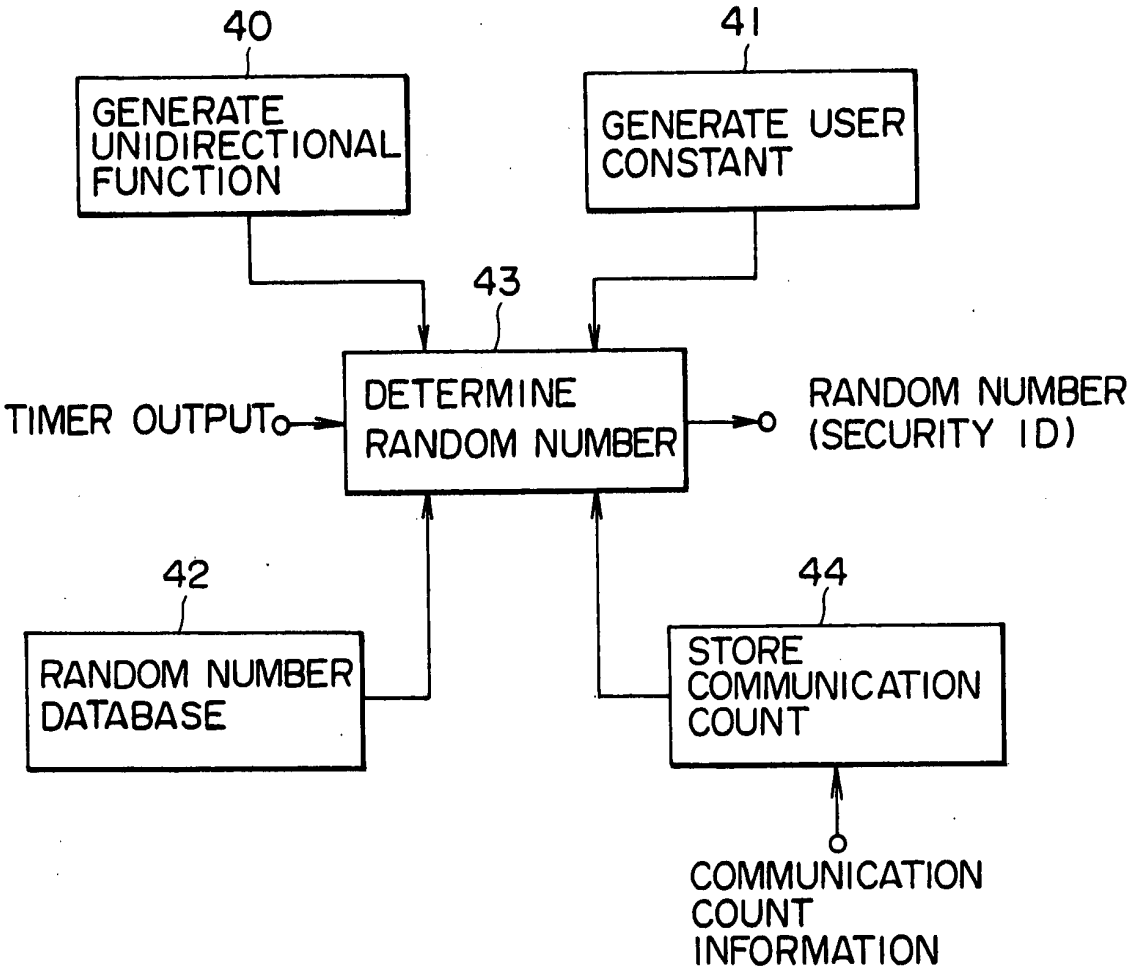
40
GENERATE UNIDIRECTIONAL FUNCTION
41
GENERATE USER CONSTANT
43
TIMER OUTPUT
DETERMINE RANDOM NUMBER
RANDOM NUMBER (SECURITY ID)
42
RANDOM NUMBER DATABASE
44
STORE COMMUNICATION COUNT
COMMUNICATION COUNT INFORMATION

FIG. 28

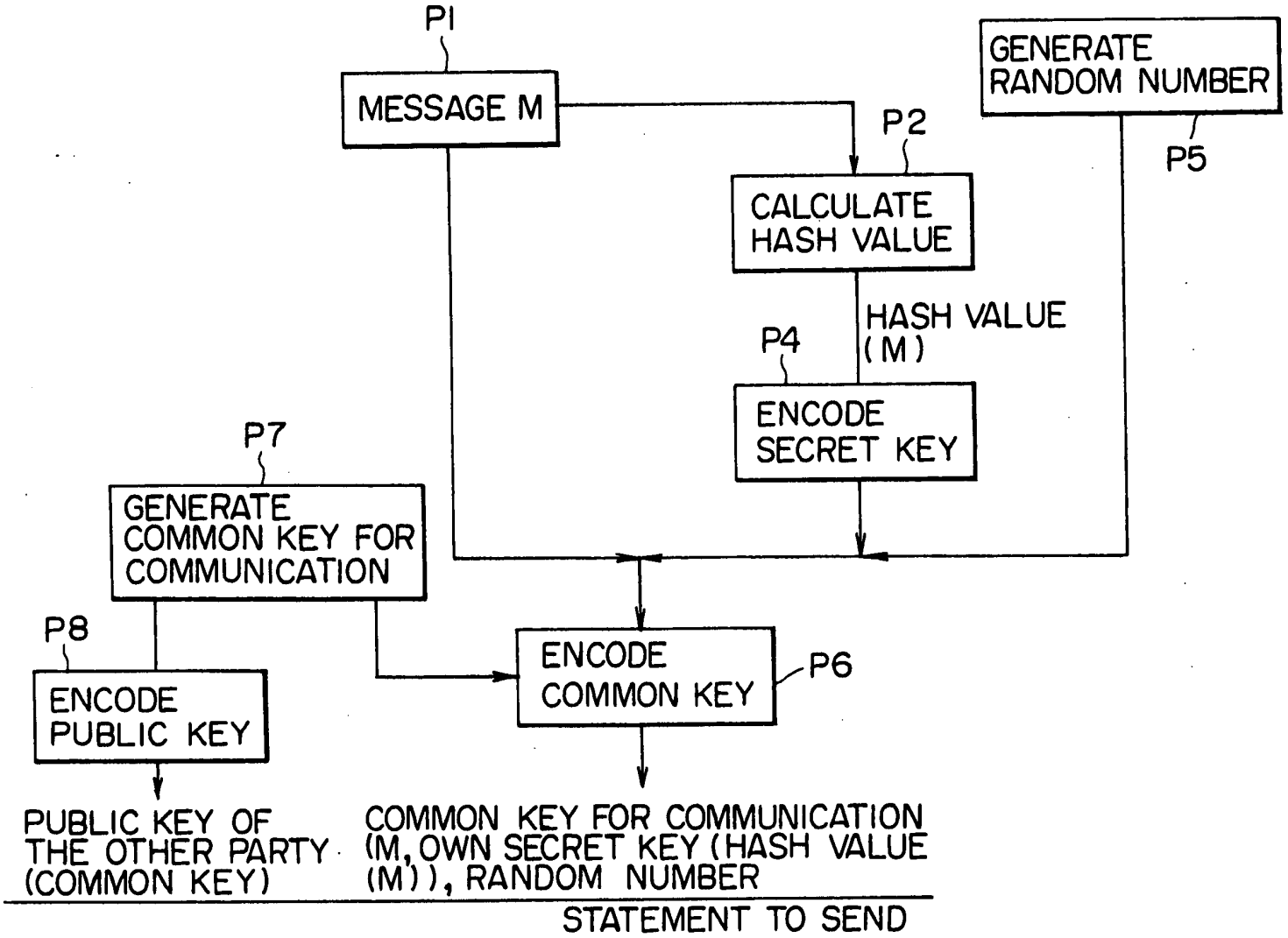
P1
MESSAGE M
GENERATE RANDOM NUMBER
P2
P5
CALCULATE HASH VALUE
HASH VALUE (M)
P4
ENCODE SECRET KEY
P7
GENERATE COMMON KEY FOR COMMUNICATION
P8
ENCODE PUBLIC KEY
ENCODE COMMON KEY
P6
PUBLIC KEY OF THE OTHER PARTY (COMMON KEY)
COMMON KEY FOR COMMUNICATION (M, OWN SECRET KEY (HASH VALUE (M')), RANDOM NUMBER
STATEMENT TO SEND

FIG. 29

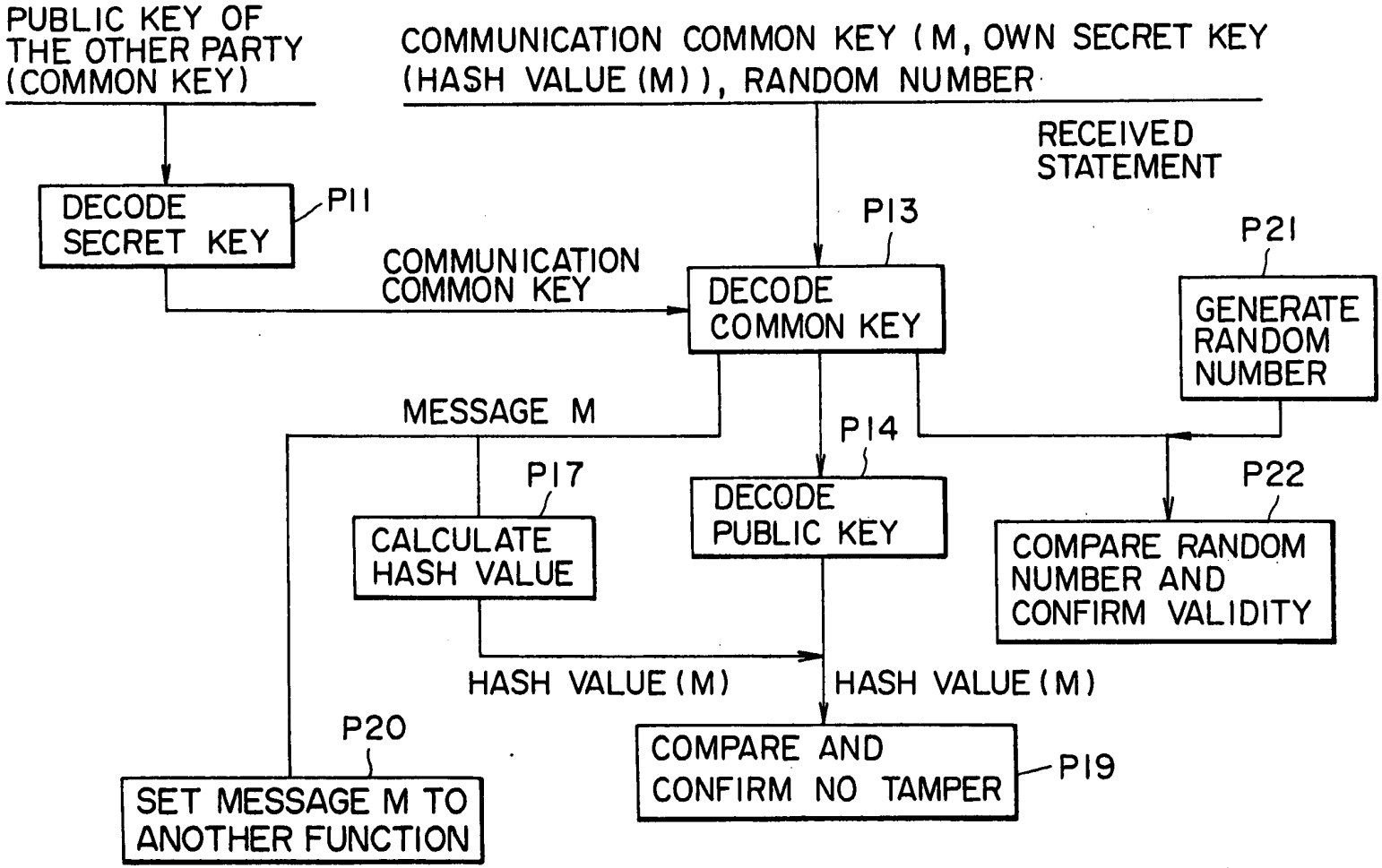
PUBLIC KEY OF THE OTHER PARTY (COMMON KEY)
COMMUNICATION COMMON KEY (M, OWN SECRET KEY (HASH VALUE (M)), RANDOM NUMBER
RECEIVED STATEMENT
DECODE SECRET KEY
P11
COMMUNICATION COMMON KEY
P13
DECODE COMMON KEY
P21
GENERATE RANDOM NUMBER
MESSAGE M
P14
P17
CALCULATE HASH VALUE
DECODE PUBLIC KEY
P22
COMPARE RANDOM NUMBER AND CONFIRM VALIDITY
HASH VALUE (M)
HASH VALUE (M)
P20
SET MESSAGE M TO ANOTHER FUNCTION
COMPARE AND CONFIRM NO TAMPER
P19

FIG. 30

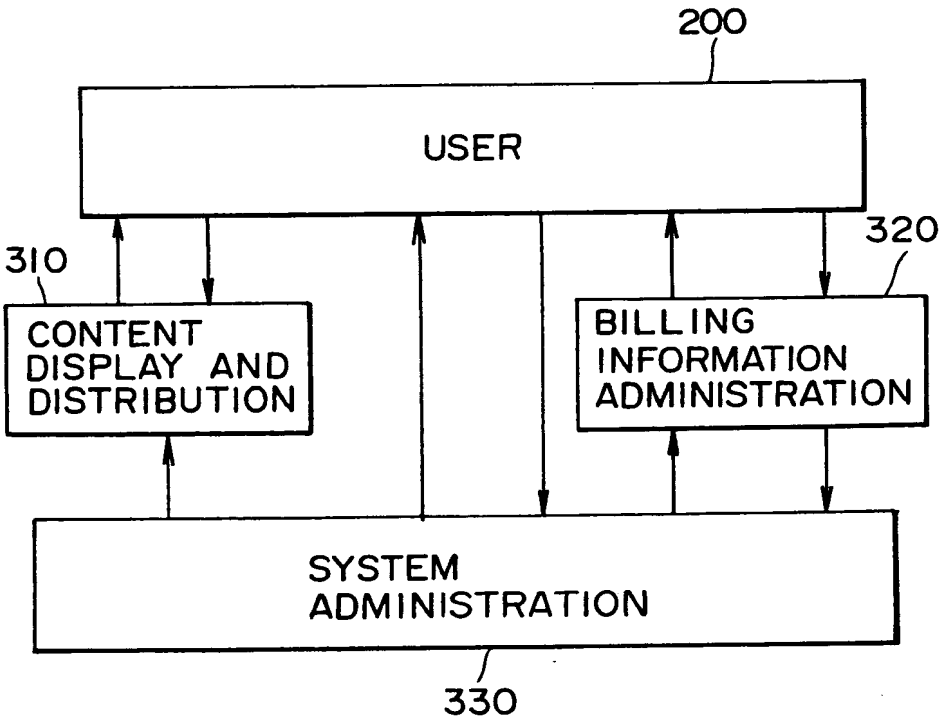
200
USER
310
320
CONTENT DISPLAY AND DISTRIBUTION
BILLING INFORMATION ADMINISTRATION
SYSTEM ADMINISTRATION
330

FIG. 31

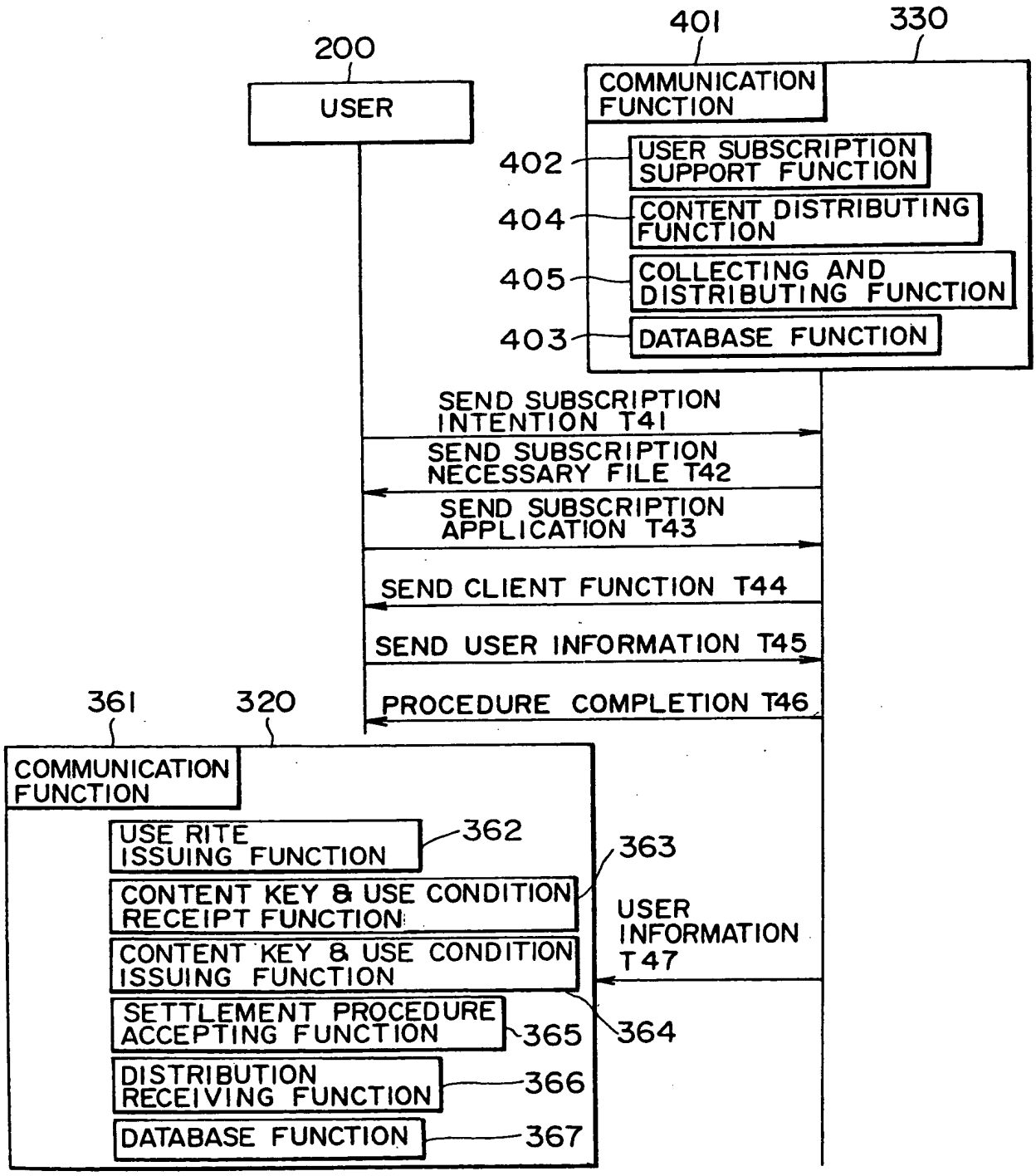
200
USER
401
330
COMMUNICATION FUNCTION
402
USER SUBSCRIPTION SUPPORT FUNCTION
404
CONTENT DISTRIBUTING FUNCTION
405
COLLECTING AND DISTRIBUTING FUNCTION
403
DATABASE FUNCTION
SEND SUBSCRIPTION INTENTION T41
SEND SUBSCRIPTION NECESSARY FILE T42
SEND SUBSCRIPTION APPLICATION T43
SEND CLIENT FUNCTION T44
SEND USER INFORMATION T45
PROCEDURE COMPLETION T46
361
320
COMMUNICATION FUNCTION
USE RITE ISSUING FUNCTION
362
CONTENT KEY & USE CONDITION RECEIPT FUNCTION
363
CONTENT KEY & USE CONDITION ISSUING FUNCTION
SETTLEMENT PROCEDURE ACCEPTING FUNCTION
365
364
DISTRIBUTION RECEIVING FUNCTION
366
DATABASE FUNCTION
367
USER INFORMATION T47

FIG. 32

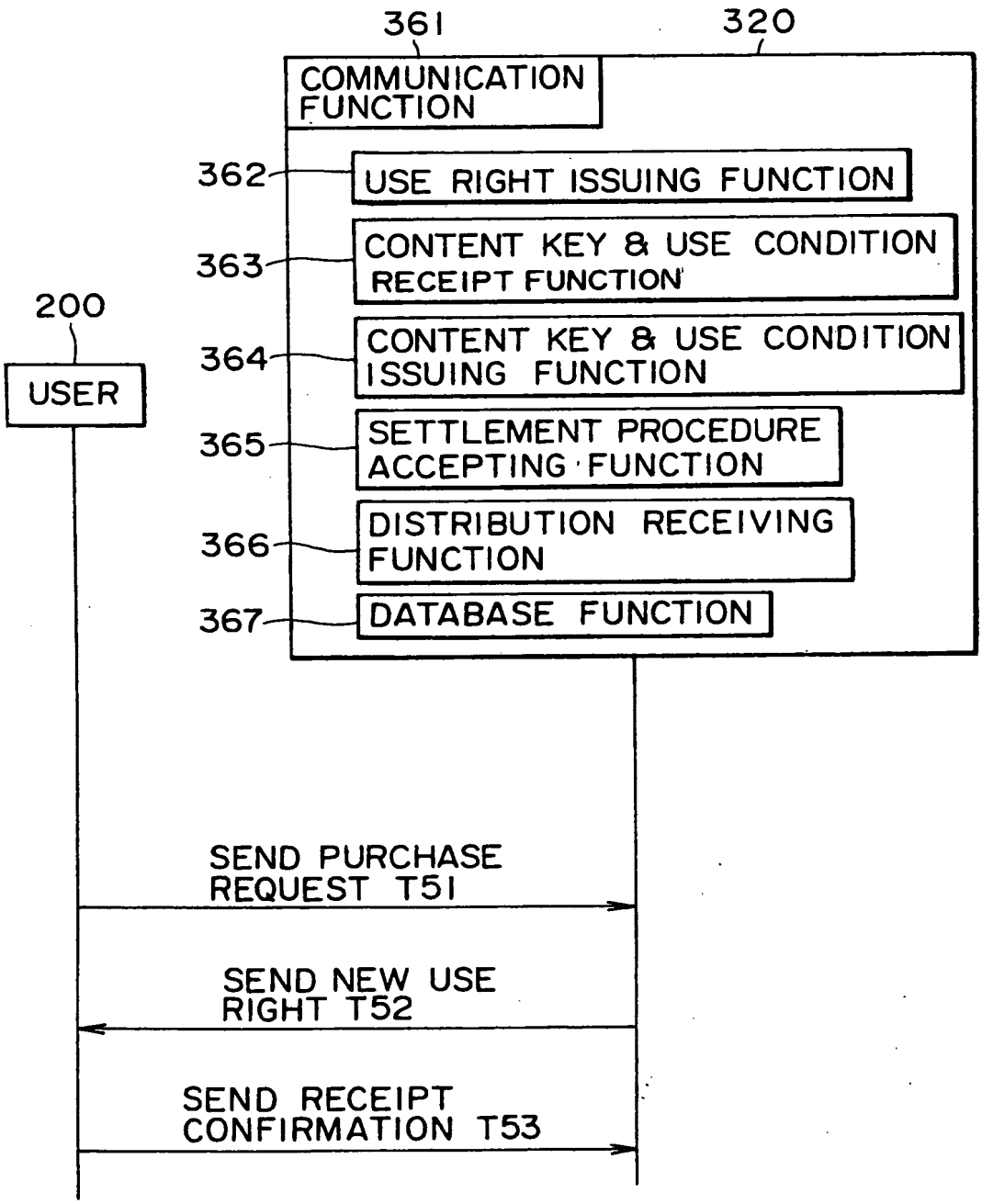
361
320
COMMUNICATION FUNCTION
362
USE RIGHT ISSUING FUNCTION
363
CONTENT KEY & USE CONDITION RECEIPT FUNCTION
364
CONTENT KEY & USE CONDITION ISSUING FUNCTION
365
SETTLEMENT PROCEDURE ACCEPTING FUNCTION
366
DISTRIBUTION RECEIVING FUNCTION
367
DATABASE FUNCTION
200
USER
SEND PURCHASE REQUEST T51
SEND NEW USE RIGHT T52
SEND RECEIPT CONFIRMATION T53

FIG. 33

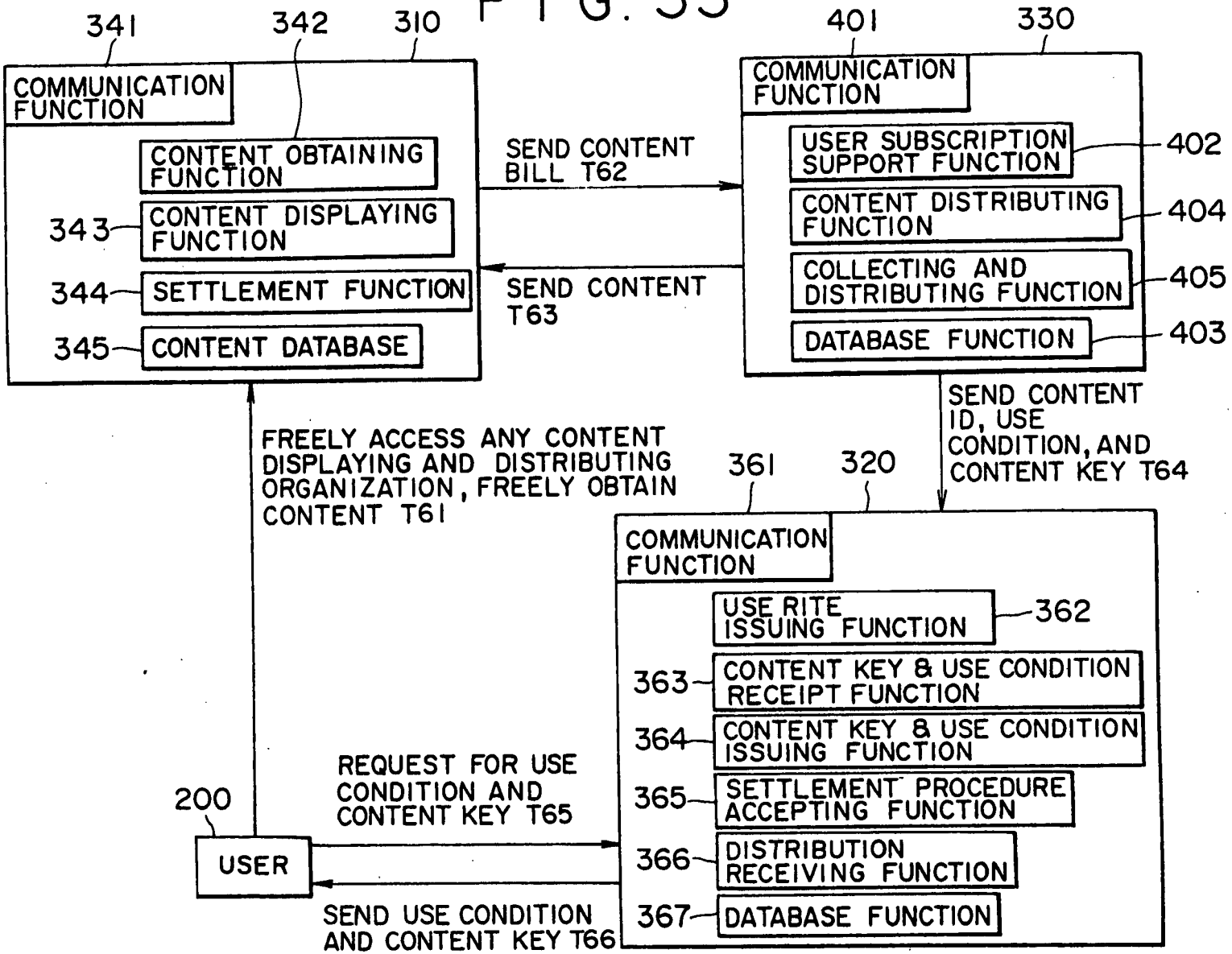
341
342
310
COMMUNICATION FUNCTION
CONTENT OBTAINING FUNCTION
343
CONTENT DISPLAYING FUNCTION
344
SETTLEMENT FUNCTION
345
CONTENT DATABASE
SEND CONTENT BILL T62
SEND CONTENT T63
401
330
COMMUNICATION FUNCTION
USER SUBSCRIPTION SUPPORT FUNCTION
402
CONTENT DISTRIBUTING FUNCTION
404
COLLECTING AND DISTRIBUTING FUNCTION
405
DATABASE FUNCTION
403
SEND CONTENT ID, USE CONDITION, AND CONTENT KEY T64
FREELY ACCESS ANY CONTENT DISPLAYING AND DISTRIBUTING ORGANIZATION, FREELY OBTAIN CONTENT T61
361
320
COMMUNICATION FUNCTION
USE RITE ISSUING FUNCTION
362
363
CONTENT KEY & USE CONDITION RECEIPT FUNCTION
364
CONTENT KEY & USE CONDITION ISSUING FUNCTION
365
SETTLEMENT PROCEDURE ACCEPTING FUNCTION
366
DISTRIBUTION RECEIVING FUNCTION
367
DATABASE FUNCTION
200
USER
REQUEST FOR USE CONDITION AND CONTENT KEY T65
SEND USE CONDITION AND CONTENT KEY T66

FIG. 34

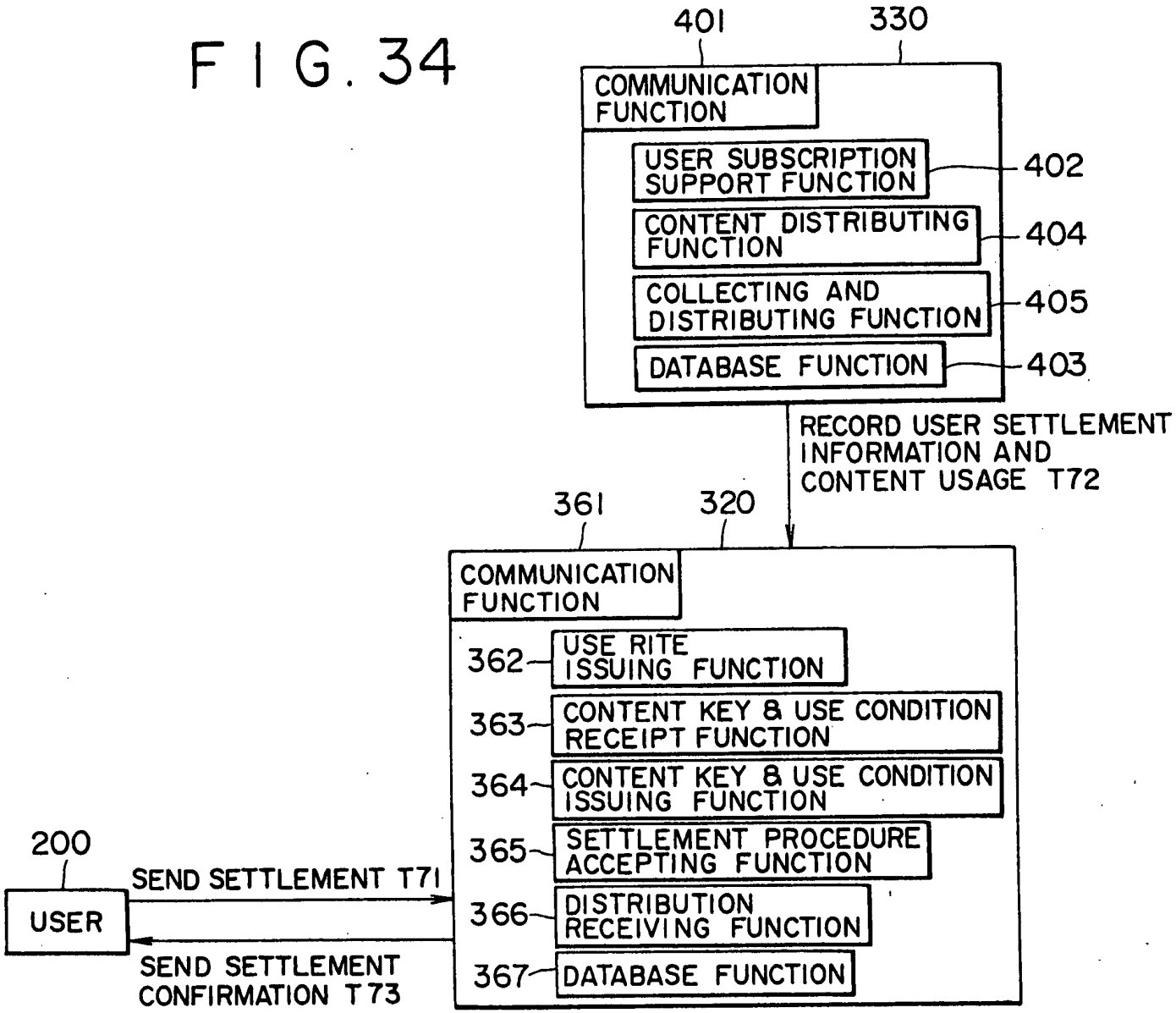
401
330
COMMUNICATION FUNCTION
USER SUBSCRIPTION SUPPORT FUNCTION
402
CONTENT DISTRIBUTING FUNCTION
404
COLLECTING AND DISTRIBUTING FUNCTION
405
DATABASE FUNCTION
403
RECORD USER SETTLEMENT INFORMATION AND CONTENT USAGE T72
361
320
COMMUNICATION FUNCTION
362
USE RITE ISSUING FUNCTION
363
CONTENT KEY & USE CONDITION RECEIPT FUNCTION
364
CONTENT KEY & USE CONDITION ISSUING FUNCTION
365
SETTLEMENT PROCEDURE ACCEPTING FUNCTION
366
DISTRIBUTION RECEIVING FUNCTION
367
DATABASE FUNCTION
200
USER
SEND SETTLEMENT T71
SEND SETTLEMENT CONFIRMATION T73

FIG. 35

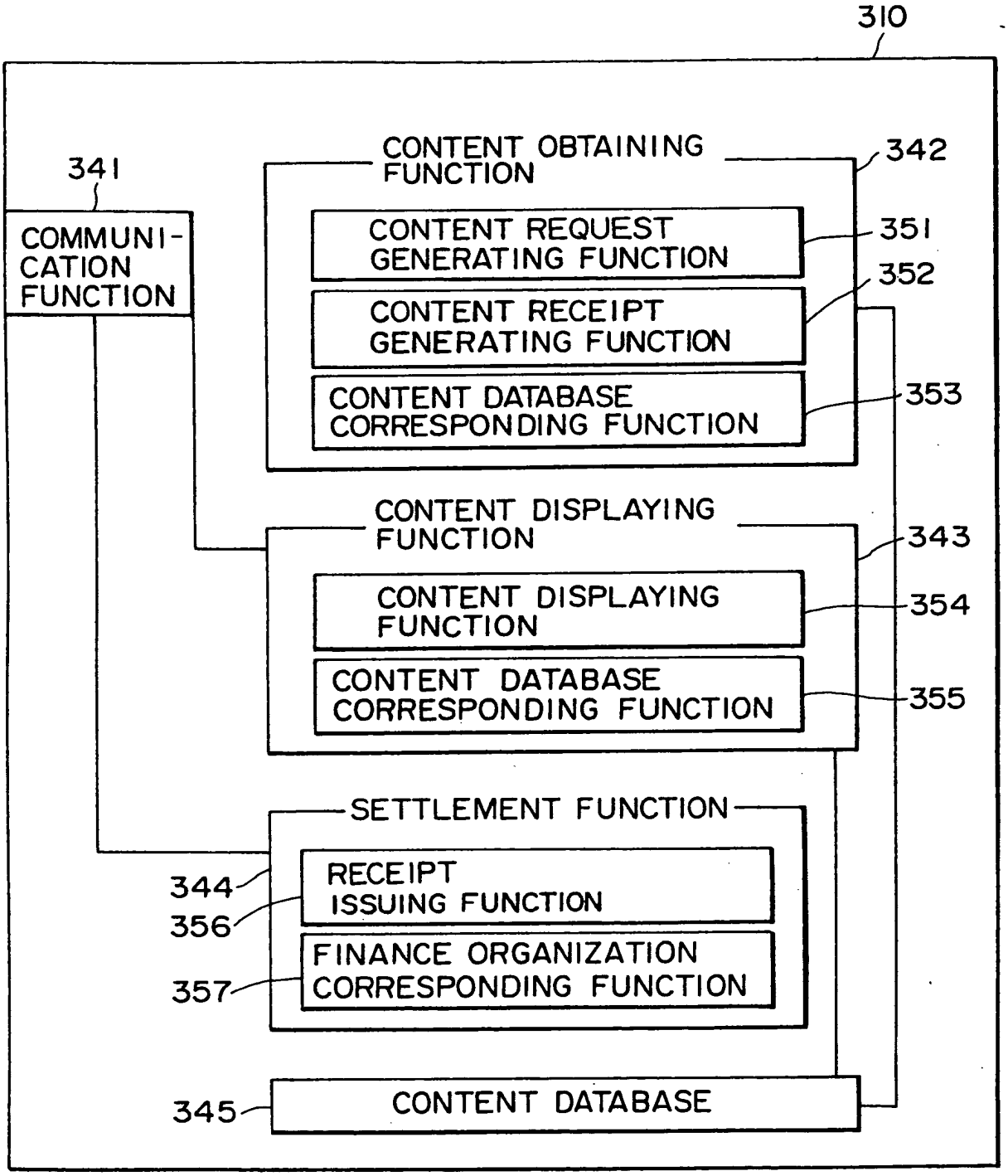
310
341
COMMUNI-
CATION
FUNCTION
CONTENT OBTAINING
FUNCTION
342
CONTENT REQUEST
GENERATING FUNCTION
351
CONTENT RECEIPT
GENERATING FUNCTION
352
CONTENT DATABASE
CORRESPONDING FUNCTION
353
CONTENT DISPLAYING
FUNCTION
343
CONTENT DISPLAYING
FUNCTION
354
CONTENT DATABASE
CORRESPONDING FUNCTION
355
SETTLEMENT FUNCTION
344
RECEIPT
ISSUING FUNCTION
356
FINANCE ORGANIZATION
CORRESPONDING FUNCTION
357
345
CONTENT DATABASE

FIG. 36

FIG.36A
FIG.36B

FIG. 36A

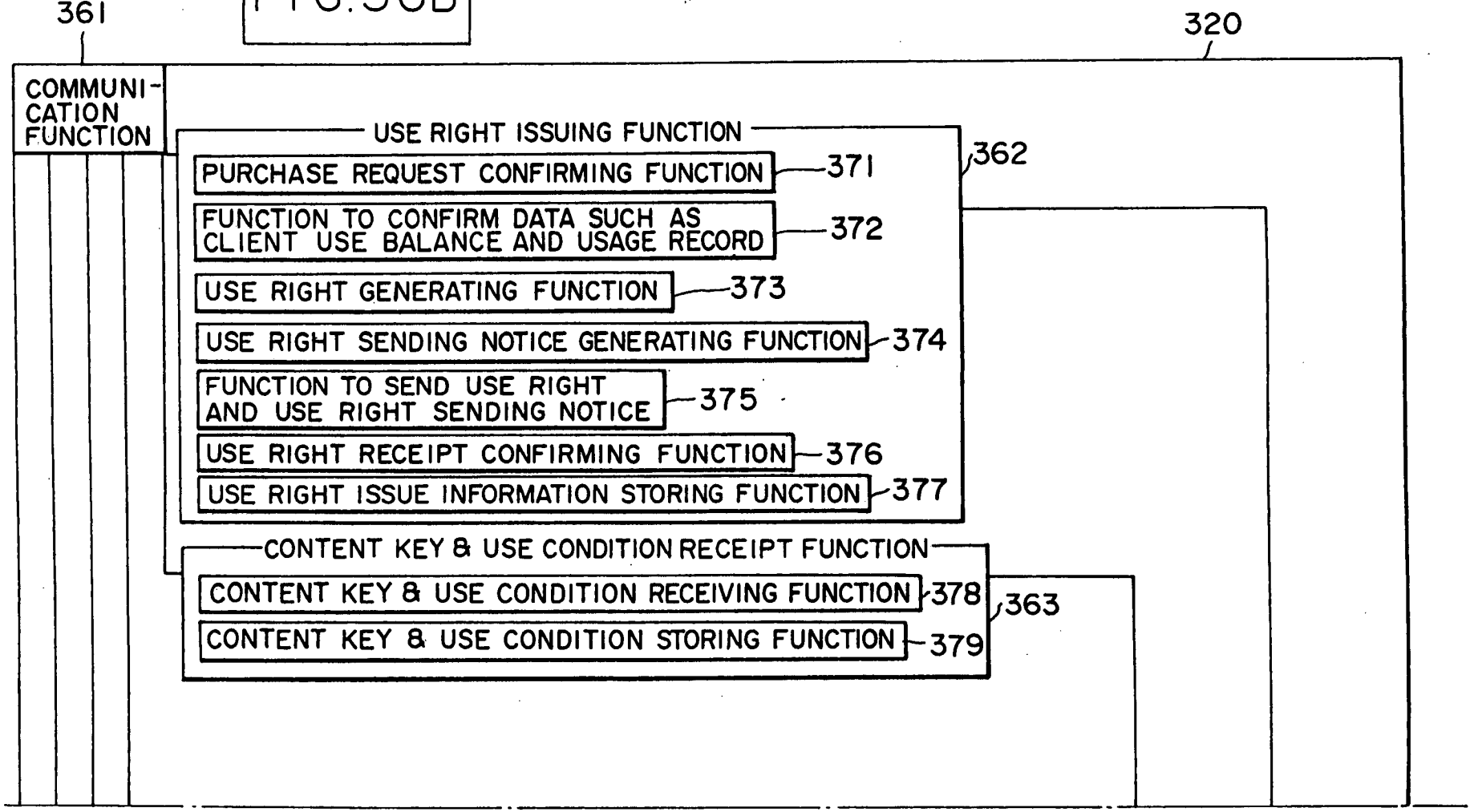

FIG. 36B

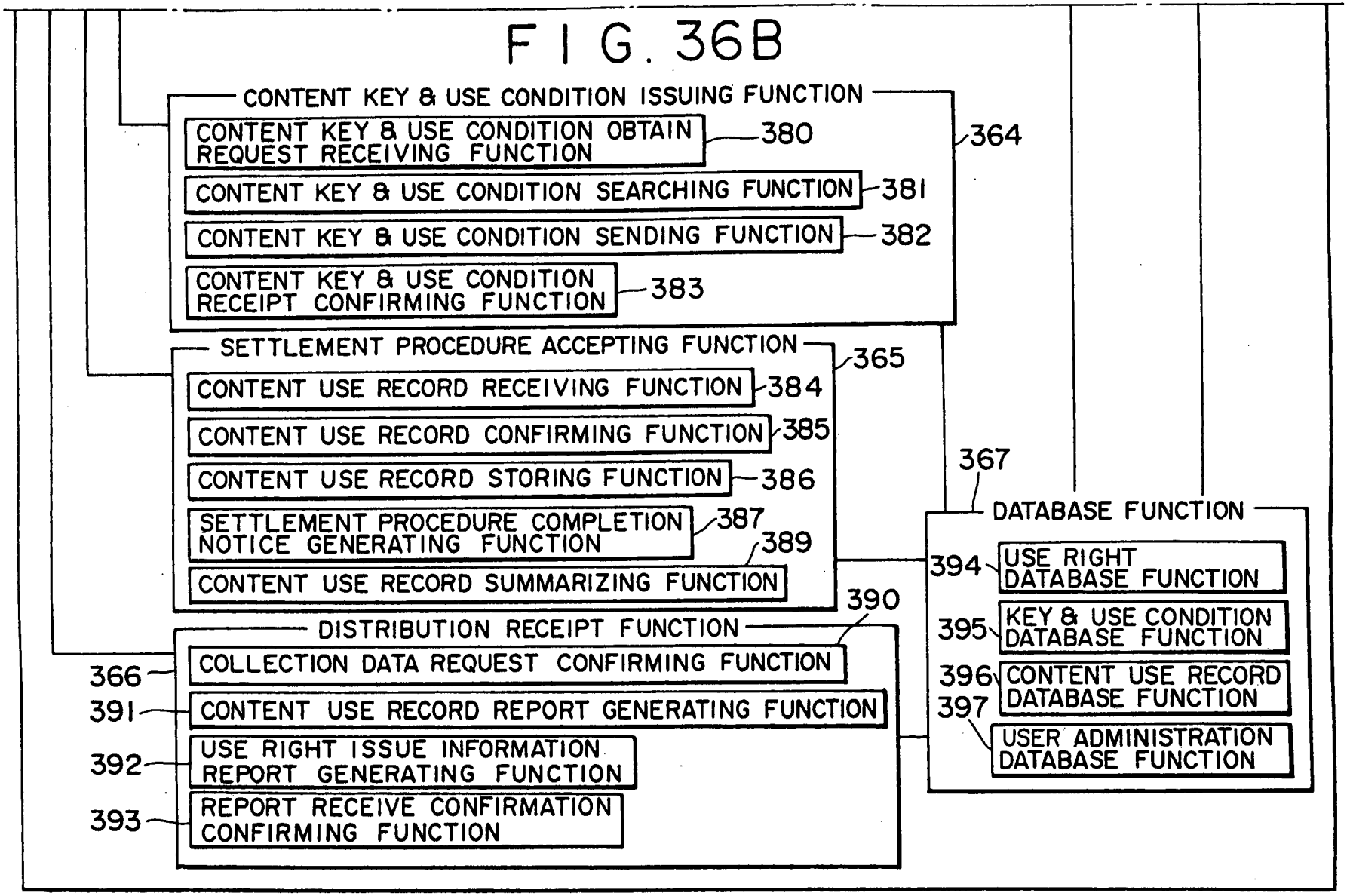
CONTENT KEY & USE CONDITION ISSUING FUNCTION
CONTENT KEY & USE CONDITION OBTAIN REQUEST RECEIVING FUNCTION
380
CONTENT KEY & USE CONDITION SEARCHING FUNCTION
381
CONTENT KEY & USE CONDITION SENDING FUNCTION
382
CONTENT KEY & USE CONDITION RECEIPT CONFIRMING FUNCTION
383
364
SETTLEMENT PROCEDURE ACCEPTING FUNCTION
365
CONTENT USE RECORD RECEIVING FUNCTION
384
CONTENT USE RECORD CONFIRMING FUNCTION
385
CONTENT USE RECORD STORING FUNCTION
386
SETTLEMENT PROCEDURE COMPLETION NOTICE GENERATING FUNCTION
387
CONTENT USE RECORD SUMMARIZING FUNCTION
389
DISTRIBUTION RECEIPT FUNCTION
390
366
COLLECTION DATA REQUEST CONFIRMING FUNCTION
391
CONTENT USE RECORD REPORT GENERATING FUNCTION
392
USE RIGHT ISSUE INFORMATION REPORT GENERATING FUNCTION
393
REPORT RECEIVE CONFIRMATION CONFIRMING FUNCTION
367
DATABASE FUNCTION
394
USE RIGHT DATABASE FUNCTION
395
KEY & USE CONDITION DATABASE FUNCTION
396
CONTENT USE RECORD DATABASE FUNCTION
397
USER ADMINISTRATION DATABASE FUNCTION

FIG.37 FIG.37A FIG.37B

FIG.37A

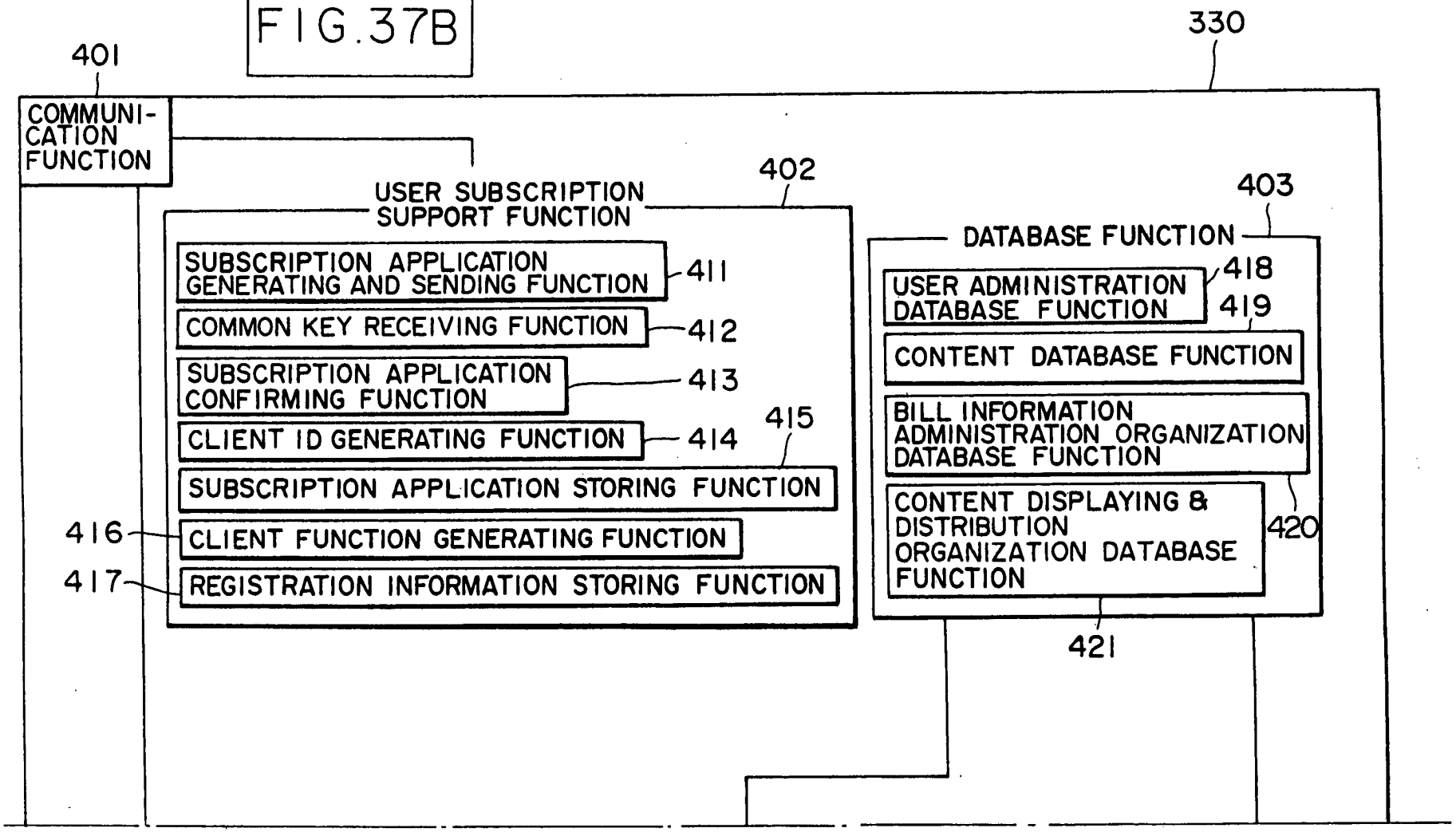

FIG. 37B

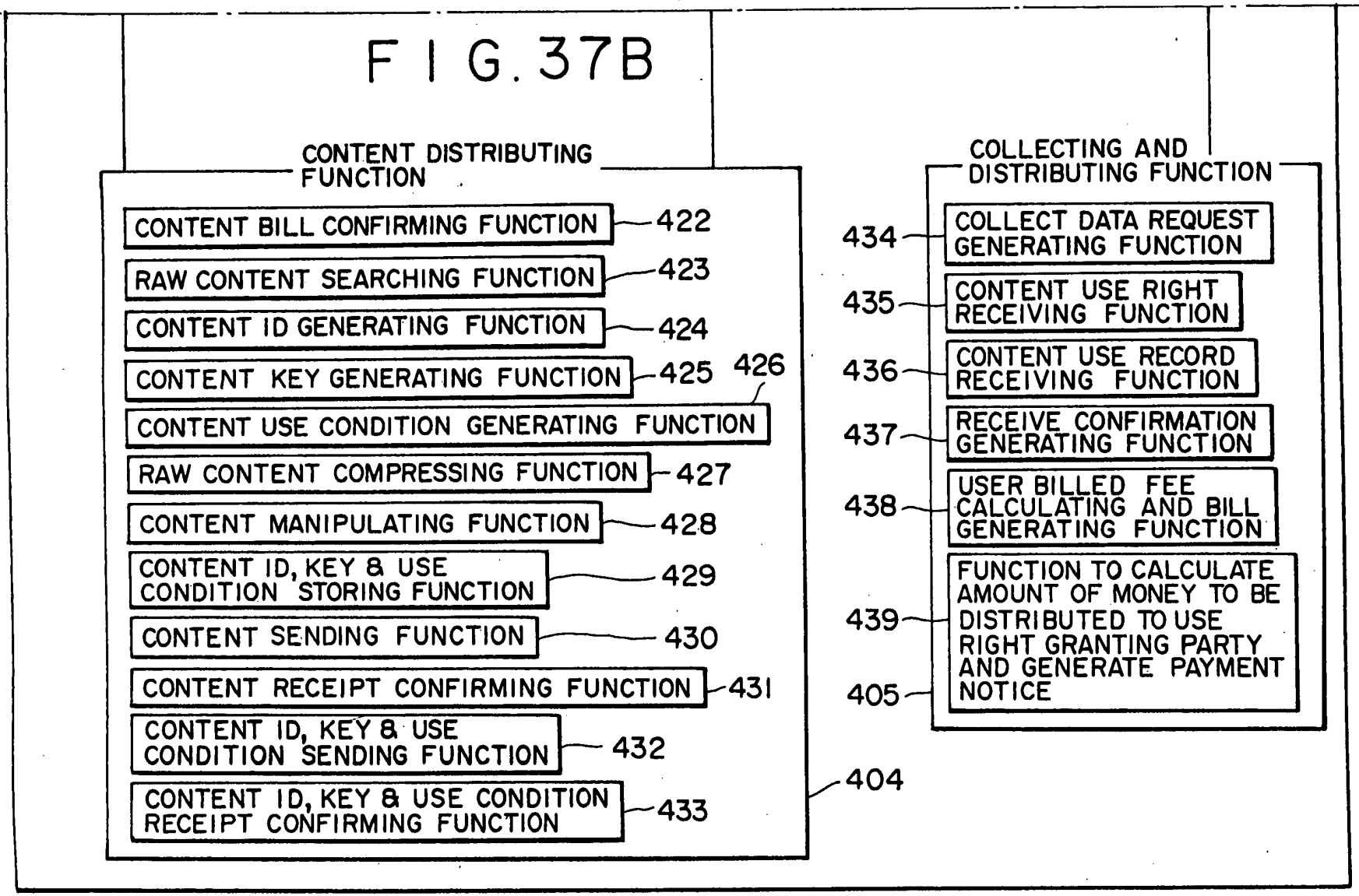
CONTENT DISTRIBUTING FUNCTION
CONTENT BILL CONFIRMING FUNCTION
422
RAW CONTENT SEARCHING FUNCTION
423
CONTENT ID GENERATING FUNCTION
424
CONTENT KEY GENERATING FUNCTION
425
426
CONTENT USE CONDITION GENERATING FUNCTION
RAW CONTENT COMPRESSING FUNCTION
427
CONTENT MANIPULATING FUNCTION
428
CONTENT ID, KEY & USE CONDITION STORING FUNCTION
429
CONTENT SENDING FUNCTION
430
CONTENT RECEIPT CONFIRMING FUNCTION
431
CONTENT ID, KEY & USE CONDITION SENDING FUNCTION
432
CONTENT ID, KEY & USE CONDITION RECEIPT CONFIRMING FUNCTION
433
404
COLLECTING AND DISTRIBUTING FUNCTION
434
COLLECT DATA REQUEST GENERATING FUNCTION
435
CONTENT USE RIGHT RECEIVING FUNCTION
436
CONTENT USE RECORD RECEIVING FUNCTION
437
RECEIVE CONFIRMATION GENERATING FUNCTION
438
USER BILLED FEE CALCULATING AND BILL GENERATING FUNCTION
439
FUNCTION TO CALCULATE AMOUNT OF MONEY TO BE DISTRIBUTED TO USE RIGHT GRANTING PARTY AND GENERATE PAYMENT NOTICE
405

FIG.38 FIG.38A FIG.38B

FIG.38A

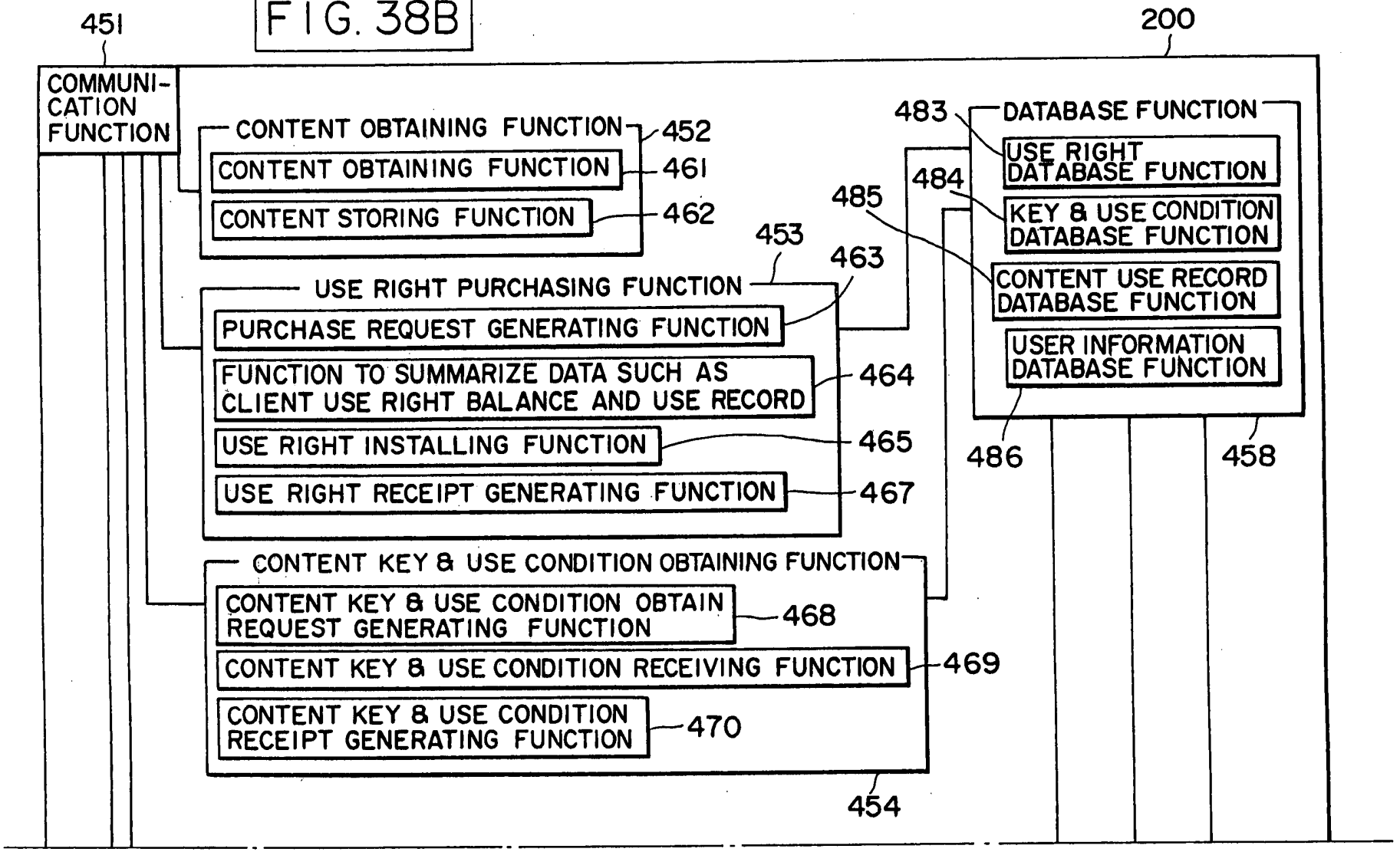

FIG. 38B

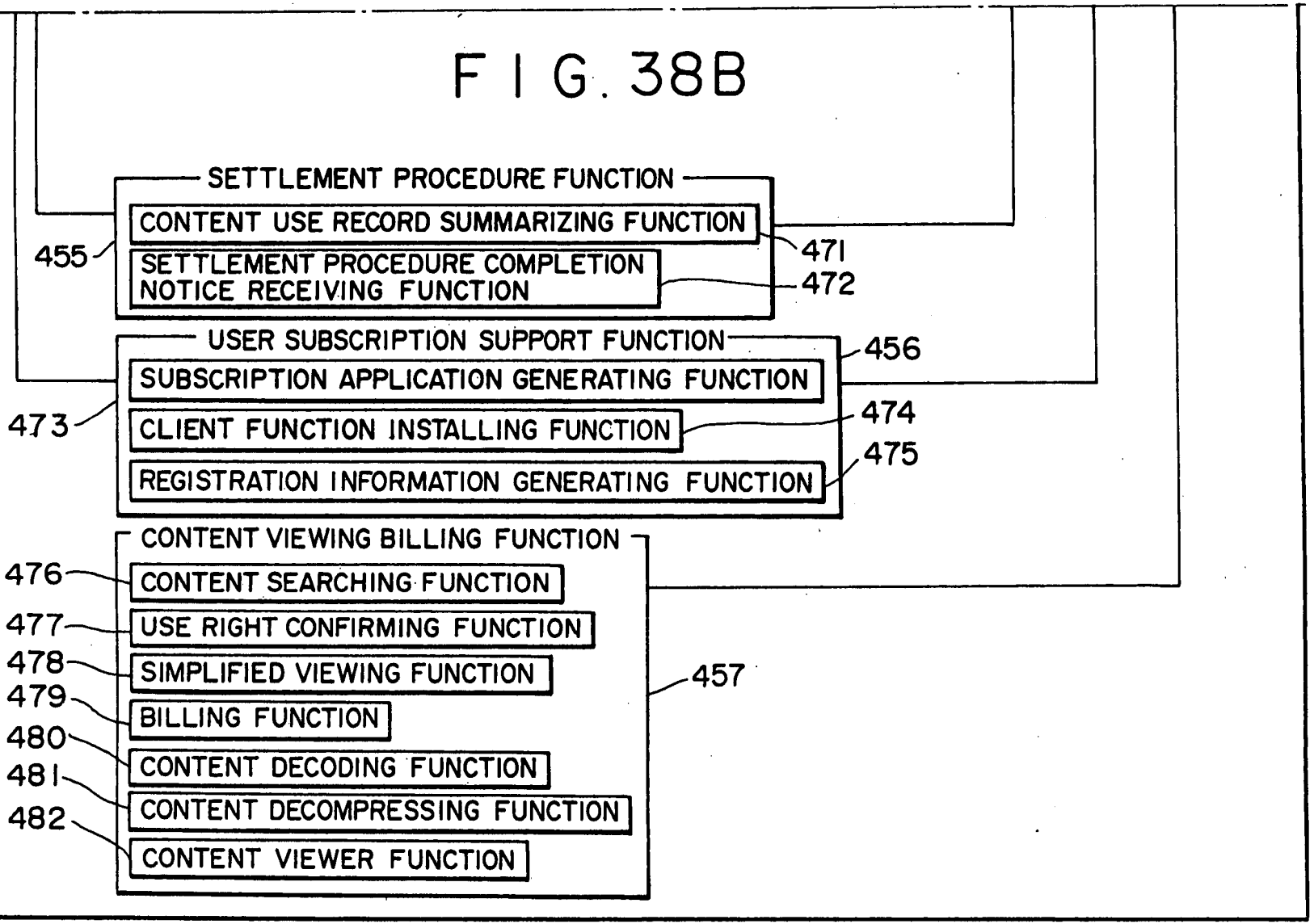
SETTLEMENT PROCEDURE FUNCTION
CONTENT USE RECORD SUMMARIZING FUNCTION
471
455
SETTLEMENT PROCEDURE COMPLETION NOTICE RECEIVING FUNCTION
472
USER SUBSCRIPTION SUPPORT FUNCTION
456
SUBSCRIPTION APPLICATION GENERATING FUNCTION
473
CLIENT FUNCTION INSTALLING FUNCTION
474
REGISTRATION INFORMATION GENERATING FUNCTION
475
CONTENT VIEWING BILLING FUNCTION
476
CONTENT SEARCHING FUNCTION
477
USE RIGHT CONFIRMING FUNCTION
478
SIMPLIFIED VIEWING FUNCTION
479
BILLING FUNCTION
480
CONTENT DECODING FUNCTION
481
CONTENT DECOMPRESSING FUNCTION
482
CONTENT VIEWER FUNCTION
457

FIG. 39

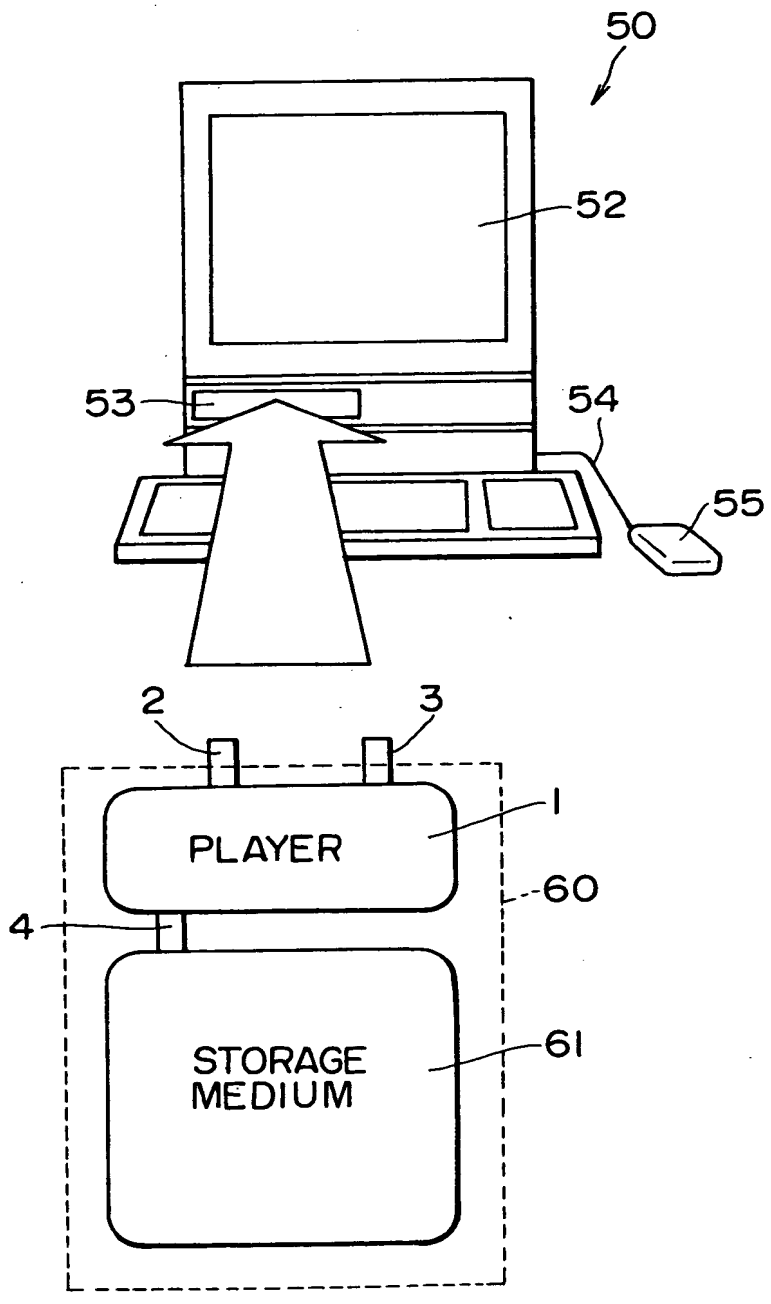
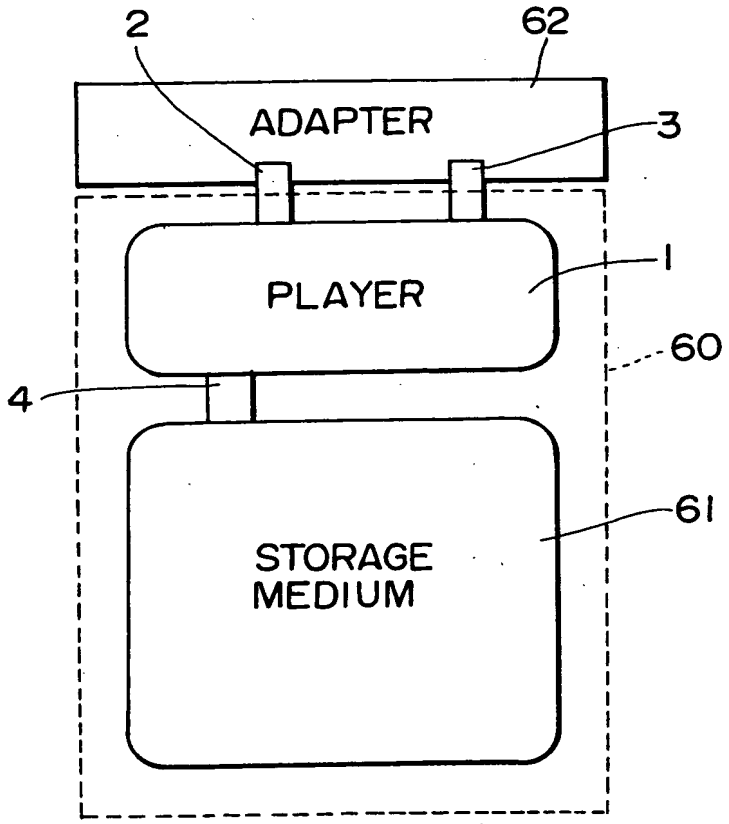
FIG. 40